



# Florida Resource Guide for Families of Young Children with Hearing Loss



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## **If you want to learn more about hearing loss and about resources for persons with hearing loss...**

then this Resource Guide is for you. Whether you are a parent who has just discovered your child has a hearing loss, a teacher, a school administrator, an audiologist, or someone in the community of persons with hearing loss, this guide can help you.

Please use this guide to:

- Learn more about hearing loss and the effects on child development.
- Explore communication opportunities.
- Find out about helpful books, resources and financial assistance.
- Learn communication tips.
- Interpret the responsibilities of Children’s Medical Services Early Steps Program under Part C of the Individuals with Disabilities Education Act (IDEA).
- Assist in developing Individualized Family Support Plans (IFSPs) for children with hearing loss.

As you look through this guide, you may come up with questions and ideas you have not considered before. Remember the decisions facing families are theirs alone. There is no one “right” way when it comes to choosing intervention services that will help a child to succeed. The child’s needs, as well as the needs of the family, will change with time. It is very important to view your decisions and your child’s development as a work in progress. Do not be afraid to remain open to new ideas if your child is not progressing as expected. A communication approach should not be solely based on the degree of hearing loss.

No matter how young your child is:

- Sign, talk, sing and play with him or her. This is fun and provides a solid foundation for turn taking, listening and learning to speak.
- Have your child’s hearing thoroughly tested by professionals experienced with infant hearing loss.
- Have your child fitted with hearing aids as soon as possible. Hearing aids will allow your child to become aware of sounds around him or her.

***Discover and explore communication opportunities that increase your child’s social, emotional and cognitive development.”***

*Author’s Note: Many of the terms in this guide might be new to you. As you read the guide, turn to the definition section in the back for clarification.*

# FEELINGS



It takes time to move through the feelings you experience when you find out your child has a hearing loss. You cannot rush through the process. Know that the feelings will pass. By seeking support from others, including those who are Deaf or Hard of Hearing, you will begin to realize how normal your baby is and accept him or her as he or she is.

- ***Stages of Coping***
  - ***Shock***
  - ***Recognition***
  - ***Recovery***
- ***Powerful Feelings Help us Heal, Adjust, Cope and Accept***
- ***Parent Testimonials***

## STAGES OF COPING

Parents who are deaf themselves may find having a deaf or hard of hearing child is what they desire. They have the language skills, life experiences, cultural and community connections so that having a deaf or hard of hearing child is normal to them and a reason to celebrate. For parents who are hearing, most have little experience with friends or family members who are deaf or hard of hearing. It is common, in those cases, for parents who learn their child has a hearing loss to experience strong emotions. In time, as hearing parents become connected with the support, networks, and services available to them they are more apt to begin to see the experience of having a deaf or hard of hearing child in a new more positive light.

People handle situations differently. When you lose something that is important to you, such as a loved one, your health, your job, or your dreams of the future, you will naturally experience a sense of loss. By becoming aware of the general stages of grief and learning to recognize what stage you are in, you find it easier to cope with the different feelings you experience.

### **First Stage: Shock**

The first reaction to the discovery that your child has a hearing loss can be shock. Why? Because you now know you have a child who is faced with additional challenges. There is a loss. As the initial shock decreases, you may begin to experience strong emotions such as anger, sadness, and denial. It is common not to want to believe this has happened to you, your child, or your family.

### **Second Stage: Recognition**

During this stage you recognize that your child has a difference that could effect his or her development, potentially causing a delay in the way in which he or she may function throughout his or her life. With early identification of hearing loss, many babies who receive hearing aids, appropriate early intervention services, and have involved parents communicating with them often, will enter school with only limited or no delays in language and learning. However, there are often situations along the way of the child's early development that can cause delays. Every individual is different!

Not everyone experiences all the emotions in the recognition stage. They may include sadness, anxiety, anger, guilt, shame, blame, disappointment, hurt, bewilderment, confusion, helplessness, loneliness, hope, and relief. These feelings are NORMAL and eventually decrease in frequency, strength, and the amount of disruption they cause in your life. Sometimes an event will occur that causes some of these feelings to reappear, but they will eventually subside.

### **Third Stage: Recovery**

During the recovery stage, you accept your child as a person with a hearing loss. Acceptance does not mean being content with your situation, but it means you are better able to cope with the difficulties and any delays in development that might occur. As you learn to manage the doctor visits, learn what you need to do consistently to enhance his or

her development, find good teachers, language specialists, and role models, and settle into a routine, you will feel less overwhelmed and accept your new role as a parent of a child with hearing loss. Being aware of your feelings can help you gain more control over them.

### **Powerful Feelings Help Us Heal, Adjust, Cope and Accept**

It is important to know that these three stages are not always separated and do not have specific feelings or behaviors associated with them. It is quite normal, at times, to go back through phases of the grieving process. Parents, caregivers, and other family members' reactions to your child may differ. You may want to discuss and talk through feelings, while another parent may keep feelings inside and find them difficult to discuss. After time, the feeling of crisis fades and healing starts. This period is the beginning of constructive acceptance. At this time, you learn and practice coping behaviors so you can meet the needs of your child.

Gathering information and talking to family and friends about the situation are healthy ways of coping. It may be necessary to include outside support to help in the coping process. Often, talking with other parents of children with a hearing loss is very beneficial to a parent of a newly diagnosed child with hearing loss. Sometimes, if feelings encountered in the recognition stage such as frustration, helplessness, and denial do not decrease but continue, it is important for a parent to seek outside support by participating in individual counseling, support groups, or visits to clergy, as a means of finding effective ways to cope.

Finally, the period of time spent in one stage or another varies from individual to individual. What is important to understand is that the rate you go through this process can differ from others around you. You may experience frustration from time to time. Being aware of this feeling will help guide you so you will not act for the wrong reasons. Each time your child comes to a major life milestone, it may impact you in a new way, and you may experience the range of emotions again.

Acceptance that your child is deaf or hard of hearing means you understand and accept the reality that their life experiences may be different than your own. With acceptance, you can celebrate your child's unique qualities and learn valuable life lessons from the journey that lies before you."

*Excerpted and adapted from: John W. Adams (1988) You and Your Hearing-Impaired Child: A Self-Instructional Guide for Parents, Gallaudet University Press, Washington, DC*

## **Parent Testimonials**

### ***Child Who Benefited from Early Intervention***

**by Katie Dagenais**

#### **A Life Changing Test**

When my husband Todd and I headed in to the hospital to have our first child, a girl, we naively thought we were prepared. When Jocelyn entered the world, we were so excited to meet her and the next 24 hours were a whirlwind. But that didn't even compare to what we would go through when Jocelyn was one day old and the nurse brought her back to our room following her newborn hearing screening. Failed was all I heard. I suddenly felt frantic. Prior to that moment, a newborn hearing screening was just a test, but now it was about my baby and there was nothing routine about it.

Two ABRs (auditory brainstem response) tests later, Jocelyn at 8 weeks old was diagnosed with moderate to severe sensorineural bilateral hearing loss – she was deaf and it was permanent. How would I communicate with her? How could I learn sign language overnight? How could I make this ok and fix her? In the weeks and months and years to come our family would go through a grieving process from shock and denial to acceptance and hope. As I look back, it was quite the journey – an accelerated ride along the path of being a parent of a child with hearing loss. For my deaf daughter Jocelyn, the pace was life altering. Because Jocelyn had a newborn hearing screening her deafness didn't go undetected and we didn't lose any precious time. After diagnosis, Jocelyn was referred to Early Steps and to our school district. At 4-months-old she got her hearing aids and at 10-months-old she began speech therapy. Today, Jocelyn has matured and developed much like her hearing and deaf peers. She speaks and signs and is a great big sister to her little brother, Luc, who is hearing.

Looking back now I see just how critical those first few weeks and months were to setting Jocelyn on her path for living life as a deaf person. I don't even want to think about what our reality would be if we'd gone home from the hospital totally unaware that something wasn't right with our newborn's hearing. The truth certainly wasn't easy to accept at first, but it gave us a very important head start to putting our daughter on a course for success, hearing loss and all.

*Katie Dagenais is a Board Member of Florida Hands & Voice.*

***Choices in Deafness:***

By Michele Love

In 1989 my husband and I had our first child, Kenneth. Named after his great grandfather he arrived to change us from a couple to a family, and we were thrilled. Ken was a wonderful baby who slept well, never cried much, was very alert and visually attune. Others would always comment how good he was, and I remember being at a restaurant with him and a business partner of my husband's commenting "Look at that, he didn't even wake up" after a server dropped an entire tray of food right next to our table. It was about that time that my husband and I began to have concerns about Ken's hearing and at 12 months of age he was officially diagnosed with a severe to profound hearing loss.

This came as a tragedy to our family. Having no knowledge of deafness and no family history of deafness, we had no idea what to expect and it felt like we had been dealt a devastating blow. I was also 2 months pregnant with our second child and had to undergo tests to make sure that I had not contracted CMV. Had CMV been the cause Ken's deafness, it could have a serious impact on the child I was carrying, with hearing loss being one of the milder affects of the virus. Although we dealt a lot those first few months after Ken's diagnosis, we also got quite an education into the world of disabilities. As things turned out, Ken was fitted with hearing aids and our second child, Ellen, was born with normal hearing.

I never imagined that there were so many choices in modes of communication, and philosophies to do with deafness and hearing loss. In 1989 when Ken was born, there was not a standardized procedure for testing children for hearing loss at birth, and that is the most positive change that has occurred since our experience. Secondly, I have since learned that not all professionals with whom you will come into contact, are to be viewed as being all-knowing and unbiased within their field. Our road has been a long one, but I feel that we have been blessed with an opportunity that we would never have experienced had Ken been born with normal hearing. Of course, things did not seem so wonderful and fair at that time.

I was given information regarding services in our area one of which being a center that specialized in Auditory Verbal training. This is an option for parents that stresses using a child's residual hearing to train him to speak through much training and exercise both professionally and reinforced on a daily basis at home. Of course, this sounded like the perfect choice for us! I called the center, paid them a visit, and was explained that through proper training, my child would be able to hear and speak using his hearing aids. This is a strict program where no visual cues are given to the child, and one's hand usually covers the mouth to avoid lip-reading dependence. We attended this program for two years, driving about 45 minutes each way two to three times a week. We also began receiving services from the county's early intervention program and several times a week a specialist would come to our home and work with our family.

At age 3 Ken was still not making much progress and only saying a few words. I learned of a program through our school system, which took an Auditory Oral approach. This mode of teaching including Auditory training, but allowed for some visual cues to be included as well. We decided to change gears and give this program a try hoping that with some visual prompts Ken's ability to speak would improve. We had a wonderful teacher who was very patient and kind with Ken, and very helpful to our family.

We stayed with the oral program until age four, when Ken was still not speaking or showing much progress. By that time we knew that he was a very bright child, but he was not showing

any inclination to speak. We were in intensive private speech therapy both privately and through the school program. The changing point for us happened when the speech therapist from the school called to talk to me. She said that day in speech; Ken wanted to play with a toy dog that was high up on a shelf. To let her know what he wanted, he got on his hands and knees to imitate a dog. It crushed me that he was unable to communicate his needs. Prior to this time, other school personnel had begun to mention that perhaps we should switch Ken to the Total Communication class at school where he would learn sign language and speech at the same time. I had held fast to the dream that he would speak, convincing myself he would be just like other children, but with hearing aids and to finally come to terms with the thought that he would never be like a “normal” child was awful. We decided to move him to the Total Communication program and looking back, I feel that this was the first time that I ever really saw Ken as “deaf”. My husband and I both had a lot of feelings to deal with that we had pushed aside in our efforts to make him a hearing child.

Ken began to blossom in the Total Communication program. All of the things that never had labels or names before began to all make sense to him. He began expressing himself and his wants and desires to us. I began to take sign language classes and we worked as a family, even grandparents and aunts and uncles, taking sign classes. In less than a year Kenny was signing quite well and I could see his frustration level with communication improve dramatically. Still no speech, but slowly I was coming to grasp the idea that that would be okay.

Today, Ken is a 6<sup>th</sup> grader at the Florida School for the Deaf and the Blind and is in the top of his class. He mainstreams to the local public school for math, which has been a good experience for him. He swims and runs track at school, and has many friends here as well. While he is a very vocal child, he still does not have great speech, but I’ve come to decide that he’s his own person, no matter how we communicate.

I have no regrets with the road that we took to get here, nor do I have any regrets with coming to use sign language as our choice of communication. It is who he is, and he is happy, well adjusted and would you know, a normal sixth grade boy. I would not change the way we came to this place, because it was such a growing process and an education for us. We have met a lot of wonderful people along the way, and I hope that any parent with a newly identified child will take the time to explore all of your options and learn as much as you can! Communication is the key in no matter what choice your family makes. It is so important that you and your child are able to communicate freely regardless of the method and road you choose to get there!

*Michele Love is a parent living in Florida*

## *For the Sake of Joy*

By Janet DesGeorges

My baby girl never heard me tell her I loved her the first two years of her life. It wasn't that I didn't love her, or that I didn't tell her everyday, but rather that she had a hearing loss that went undetected for those two years, and was unable to hear any speech. There was no newborn hearing screening process in the hospital where she was born.

I remember the signs along the way. As a toddler, my daughter Sara would walk up to the TV and put her ear up to the speaker. If I entered her room, and she was looking away from me, she wouldn't turn to me, even if I had said "hello." I did the pan banging behind her head, and when she turned her head to that, my fears would be alleviated for a while. When I thought of deafness, I understood it to be all or nothing. I didn't realize Sara could have a hearing loss and still be able to hear some noise, but not speech. I think there is an assumption by some people that if a child has a hearing loss, a parent will pick up on it right away, and seek out help for their child. It took several months for me to be able to follow through on my intuition that something was not quite right. I don't even understand why I wasn't able to seek help for my daughter the first time I questioned her ability to hear. I guess it was the hope that if I just waited, everything would turn out fine.

During that time in my daughter's life, I remember the frustration of not being able to communicate with Sara, and not understanding why. As a mother of three, and a daycare provider for fifteen years, I had a lot of confidence in my parenting skills. So the inability for me to understand Sara when she wanted something was a mystery to me. And her inability to follow even the simplest directions was a very frustrating time in our lives.

When I think of those first two years of my daughter's life, there is a myriad of emotions that still flood my heart to this day: Self-reproach for not having the insight to follow up on the questions that came up about Sara. Sorrow for my daughter not having a language to use during that critical time of development. Anger over the fact that the hospital where Sara was born did not do a simple test that could have changed the life of our family, and perhaps the future of my daughter's life. By having the knowledge of a difference in our daughter from the start, we could have intervened on her behalf to facilitate communication from the start. I'm sure some of the frustrations that occurred over the span of those two years, having intervened, would not have happened.

When my daughter was finally identified, the help our family received from early intervention helped to set the framework for our attitudes. We also received much unbiased information to help us set a course for our daughter's education and the tools we needed to help her succeed in life. We are very thankful for the people who were able to provide their professional expertise, yet also gave us the respect, as a family to make the choices we felt were appropriate.

I guess most of all, when you discover you have a child who is deaf, you come to discover that it is not an awful thing. It is just a part of who your child is. It does not change the way you love or accept your child. It does not change the hopes and dreams you have for your child, and who they will become. You just open your heart to a different way of interacting in the world around you. There is a joy in discovering your child as they grow, and I just wish that opportunity to know my child, a child with a hearing loss, had been there for me from the start. For the sake of joy, let's identify all children who are deaf or hard of hearing from birth, so families and communities can learn from the beginning how to get the message across..."I love you."

*Janet DesGeorges is a co-founder and the Executive Director at Hands & Voices Headquarters and can be found at [www.handsandvoices.org](http://www.handsandvoices.org).*

# GETTING STARTED



A reaction many parents have to the news that their child has a hearing loss is to stop speaking, singing and cooing to him or her. This is a normal reaction, but a child with a hearing loss needs everything a child with normal hearing needs. Your child needs your smile, gestures, talking, playing, and responding to his or her moods, actions, signs, and noises. Children with hearing loss actually need to be surrounded by additional language and sound so they can eventually make sense of it. **Remember that your child is a child who happens to have a hearing loss.**

- *Early Identification and Diagnosis is Essential*
- *Who Can Help?*
- *Responses of Children with Hearing Loss to Sound*
- *Does Your Child...*

***Early Identification and diagnosis is essential.***

All babies born in Florida hospitals are required by law to have their hearing screened. This test is painless and performed while a baby is sleeping. It checks whether each ear is functioning properly. If a baby fails the newborn hearing screening, he or she will need to have a complete hearing evaluation by a pediatric audiologist (hearing doctor). This will confirm or rule out a hearing loss. The type and degree of loss will be measured.

**Who can help?**

It is important to choose professionals carefully. Babies as young as 3 weeks old can be fitted with hearing aids. Services to help you understand your baby's needs can begin within 6 weeks of referral. Do not wait. It is important that you are comfortable working with the professionals you choose, since they will be part of your team for many years. It is all right to ask them questions and expect the answers to be understandable. **The following list of professionals may work with you and make up your intervention team. One person may fill multiple roles on the team.**

**Pediatric Audiologist (hearing doctor)**

1. Specializes in working with infants and young children and evaluates their hearing in each ear at a range of frequencies.
2. Makes the referral to the Children's Medical Services Early Steps Program.
3. Arranges to fit hearing aids on your child and may provide them on a trial basis.
4. Makes earmold impressions and keeps child with well-fitting earmolds.
5. Has loaner hearing aids available.
6. Has the resources to repair hearing aids in a timely manner.
7. Reviews the results of the audiogram with your family at the time of each evaluation.
8. Provides a comprehensive written report, with a copy of the audiogram, to your child's doctor and with your consent, Early Steps.
9. Tests your child while wearing amplification and questions parents about child's responses to sound at home.
10. Is familiar with procedures for Individualized Family Support Plan (IFSP) development and for paying for hearing aids or assistive technology.
11. Works on the intervention team with you and early intervention specialists to monitor and maintain your child's amplification systems (hearing aids, FM systems, cochlear implants).

**Pediatrician/Family Practitioner**

1. Makes sure your child has received a hearing evaluation or follow up hearing screening before 3 months of age if he or she failed newborn hearing screening.
2. Refers you to an audiologist skilled in testing the hearing of infants and toddlers when you express concern about your child's hearing.
3. Answers your questions about medical or surgical treatment of different types of hearing loss.

4. Confirms the need for prompt action involving amplification and early intervention once your child has been diagnosed with hearing loss.
5. Treats or refers your child to medical ear specialists when your child has middle ear disease.
6. Makes a referral to the Early Steps Program, or assures that a referral has been made, so support services can begin.

### **Otolaryngologist or Ear, Nose, Throat (ENT) Physician**

1. Confirms whether or not there is a medically treatable condition in your child's outer ear or middle ear that is causing the hearing loss.
2. Answers your questions about medical or surgical treatment of different types of hearing loss.
3. Signs a form authorizing use of hearing aids with your child (required by law before hearing aids can be fit on a child).
4. Places ventilation, or PE tubes in your child's eardrums if he or she has chronic middle ear disease that is not cleared up by antibiotics. Also prescribes antibiotics and performs other ear, nose and throat surgeries.

### **Early Steps Hearing Specialist**

1. Meets with your family to provide initial information about hearing loss.
2. Helps you begin to understand hearing loss, works with you to determine the size of your child's listening bubble, and discusses the meaning of the audiogram.
3. Helps you obtain, understand and do daily checks on the function of the hearing aids.
4. Provides information on development of effective parent-child interaction.
5. Explores communication options with your family in an unbiased manner.
6. Helps you complete a Communication Plan once you know how you would like to communicate with your child
7. Assists you with obtaining appropriate early intervention services.
8. Provides understanding and support to the family.
9. Works with you to monitor your child's progress in developing language and auditory skills at least every 6 months.

### **Early Intervention Service Provider – Hearing Specialist**

1. Provides information about hearing loss, audiograms, auditory development, amplification, communication options and developmental issues.
2. Works on the intervention team with you to develop the intervention plan for your family.
3. Provides ongoing support to your family, helping you to learn how to best assist your baby's communication development and overall learning.
4. Helps you access services and identify resources that may be helpful.

### **Speech Language Pathologist (SLP)**

1. Works on the Early Steps intervention team to develop family centered strategies that address your child's early communication, language, and speech needs.

2. Gives you a time line when services will begin and end.
3. Describes how your family will be involved in developing communication skills with your child. Defines your role in communication skill development and expectations about your family's participation.
4. Provides you with high-quality instruction, demonstration and coaching in communication skill development for your child.
5. Helps you learn how to help your child listen during everyday activities and routines while wearing hearing aids all waking hours.
6. Answers your questions about your child's hearing loss.
7. Helps you stimulate spoken language development.
8. Listens to your observations and concerns about your child and discusses these with you.
9. Works with the audiologist to help your child learn to use amplification and make sure your child's hearing aids function properly.
10. Keeps records of your child's progress in developing communication skills.
11. Communicates with other members of your child's Early Steps team

### **Auditory-Verbal Therapist**

Should be comfortable doing all the items a speech and language pathologist does plus the following:

1. Uses an auditory verbal treatment plan for developing speech and language for children with hearing loss through maximum use of amplified hearing.
2. Works directly with your child and family while teaching you auditory verbal techniques to support your child's growth of auditory, speech, language, and cognitive skills.

### **Teacher of the Deaf**

1. Develops family-centered strategies and trains parents to address the child's language and communication needs through signing, listening, and speaking.
2. Provides links to people and children in the community with hearing loss and support services.
3. Provides information on hearing loss and its effects on learning and teaching strategies.

### **Schools for the Deaf**

1. Schools for the Deaf have outreach services that can provide parents with information, resources, direct services, and networks of support.
2. Schools for the Deaf have a critical mass of deaf or hard of hearing peers and adult role models.
3. Schools for the Deaf have highly skilled and trained staff and teachers that focus entirely on educating deaf and hard of hearing children from ages 0 to 22.
4. Schools for the Deaf hold a variety of events throughout the year that families and their children can partake in.

### **The Deaf Community**

1. Deaf role models can be language models for deaf and hard of hearing children.

2. Deaf role models can help explain the importance of visual environments, room designs, lighting, and visual technology that create accessibility in the home and at school.
3. Deaf role models can provide networks to events and activities within the Deaf community.

**Other Parents of Children Who Have a Hearing Loss**

1. Share experiences they have had with professionals and early intervention programs.
2. Tell you about people and information sources they have found useful.
3. Listen to you.
4. Share with you their feelings related to parenting a child with hearing loss and how their feelings have changed over time.
5. Tell you about their child’s achievements.
6. Get together with you so your children can play together.

**Your Family**

1. Helps your child develop communication and social skills by engaging your child in natural everyday routines.
2. Models natural language for your child.
3. Allows you to take a needed break for yourself.
4. Listens to you, provides support and understanding.

**Responses of Children with Hearing Loss to Sound**

Some children will not be identified through the hearing screening in the hospital and will develop a hearing loss at a later time. The following is a list of behaviors that sometimes indicate there is a problem with a child’s hearing. If the answer is "no" to any of the following questions, and the child has not had a complete audiological evaluation in the last few months, you should promptly speak with your child’s doctor about having your child’s hearing tested by a pediatric audiologist. Hearing ability can change!

Even a mild hearing loss or a hearing loss in only one ear will typically affect speech and language development.

**DOES YOUR CHILD...**

**If no problems, at least 2 of the 3 items in the child’s (adjusted) age group should be checked.**

AGE		YES	NO
1-2 mo	Startle to loud sounds (throws arms out)?		
1-2 mo	Move arms or legs in time to speech patterns?		
2-3 mo	Quiet when he is upset and hears your voice?		
3 mo	Look around to see what is making a new sound?		

3 mo	Look at toys or objects when they make sound?		
3 mo	Imitate vowel sounds like oo, ee, ah?		
4-6 mo	React to a change in the tone of your voice? (i.e. happy, mad)		
4-6 mo	Quiet when talked to with a soothing voice?		
4-6 mo	Move eyes toward the direction of sounds heard from the side?		
6-9 mo	By 7 months look down if a sound occurs from below?		
6-9 mo	Aware of parent’s voice when heard from a distance (next room)?		
6-9 mo	By 9 months looks up for a sound from above?		
9-12 mo	Watch TV for a short time (i.e., reacts to songs, rhymes, etc.)?		
9-12 mo	Turn or look when you say his name?		
9-12 mo	Babble using a variety of sounds like baba, geegoo?		
<b>AGE</b>		<b>YES</b>	<b>NO</b>
12-18 mo	Turn head quickly to locate sound from any direction?		
12-18 mo	React to or show pleasure at new or unusual sounds (whistle, buzzer)?		
12-18 mo	Respond to a simple command with no gestures (“Come here” “Sit down”)		
18-24 mo	“Dance” to music?		
18-24 mo	Let you know what he wants or needs by using his voice?		
18-24 mo	Consistently use 20 or more words?		
24 mo	Point to some body parts when asked (“Where’s your nose”)?		
24 mo	Enjoy listening to stories?		
24 mo	Understand many words (200+)?		
30-36 mo	Notice and identify different sounds (phone, doorbell)?		
30-36 mo	Listen to stories in a group of others?		
30-36 mo	Understand most things said to him?		

<b>RED FLAG HEARING QUESTIONS-HEARING</b>	<b>AGE</b>	<b>YES</b>	<b>NO</b>
Does your child often fail to respond to typical sounds in the environment? (i.e., dog bark, door bell, item dropped behind)?	3+ months		

Does your child often fail to respond to his name or a noise that you would expect him to hear? (i.e. pan dropping)	3+ months		
Does your child seem to respond less to sound now than when he/she was younger?	6+ months		
Does your child seem to turn more to one side than the other when sounds occur?	7-9+ months		
Does your child often seem to watch your lips while you speak?	12+ months		

# HEARING TESTS



It is important to have your child's hearing tested as soon as possible. No child is too young! Find an audiologist who has experience working with infants and children. Go to <http://www.floridahealth.gov/programs-and-services/childrens-health/newborn-screening/documents/cms-approved-pediatric-audiologists.pdf> for a list of pediatric audiologists. Since most children over 3 months of age will not tolerate having all tests done at one time, a few visits may be necessary to complete testing. Some children may need to be sedated for testing. Evaluation under 3 months of age usually avoids the need for sedation to diagnose hearing ability. Feel free to ask questions about what the tests measure, how the tests work, what they expect to find, and how to read the test results.

- *Types of Hearing Tests*

**Types of Hearing Tests**

<i>Name of Test</i>	<i>Procedure</i>	<i>Format of Results</i>	<i>Age Appropriate</i>
Auditory (Brainstem) Evoked Response (called ABR or AER) or Auditory Steady State Response (ASSR)	<ul style="list-style-type: none"> <li>• Requires no voluntary response from child</li> <li>• Response is measured by electrodes on scalp</li> <li>• Sounds are presented through earphones</li> <li>• Estimate of hearing level by determining the softest sounds that produce measurable brain response</li> </ul>	Wave form that indicates response of the auditory nerve (CN VIII)	<ul style="list-style-type: none"> <li>• Infants under 3 months without sedation</li> <li>• Infants and toddlers over 3 months, sedation is typically used</li> </ul>
Otoacoustic Emissions (OAE)	<ul style="list-style-type: none"> <li>• Requires no voluntary response from child</li> <li>• Response is measured by a small probe in the ear canal</li> <li>• Sounds are presented through the same probe</li> <li>• Does not determine severity of hearing loss</li> <li>• Does confirm presence of permanent hearing loss</li> </ul>	Graph displaying response of inner ear	<ul style="list-style-type: none"> <li>• Newborns, infants, toddlers, older children. No sedation is required</li> <li>• Child must be still &amp; quiet for up to one minute</li> </ul>
Immittance Measures	<ul style="list-style-type: none"> <li>• No response is required from the child</li> <li>• Response is measured by a probe placed in child's ear canal</li> <li>• Sounds are presented through the same probe</li> <li>• A computer measures how the eardrum responds to different air pressures</li> <li>• Does not measure hearing loss-indicates if infection or middle ear fluid behind the eardrum may be present</li> </ul>	Graph of response of eardrum to changes in air pressure	<ul style="list-style-type: none"> <li>• Infants (at least 5 months old), toddlers, and older children. No sedation is required</li> <li>• Infants under 5 months old only if high frequency sound is used</li> </ul>

<i>Name of Test</i>	<i>Procedure</i>	<i>Format of Results</i>	<i>Age Appropriate</i>
Behavioral Observation Audiometry (BOA)	<ul style="list-style-type: none"> <li>• Requires an unconditioned response from a child -- eye widening; sucking start or stop</li> <li>• Conducted in a soundproof booth</li> <li>• Sounds from an audiometer are presented through insert earphones or loud speakers (tones of varied pitch and loudness, speech, etc.)</li> <li>• Estimates the degree of hearing loss</li> </ul>	Audiogram -- quietest levels at which child appears to detect sounds at the different pitches tested	<ul style="list-style-type: none"> <li>• Younger than 6 months of age. Should be used in conjunction with ABR, OAE and Immittance Measures to verify a hearing loss is present</li> </ul>
Visual Reinforcement Audiometry (VRA)	<ul style="list-style-type: none"> <li>• Requires a conditioned response (looking at a lighted toy)</li> <li>• Conducted in a soundproof booth</li> <li>• Sounds presented via loudspeakers, insert earphones, or a small vibrator on the skull bone are varied in loudness and pitch by an audiometer</li> <li>• Degree of hearing loss is determined</li> </ul>	Audiogram -- softest levels at which child responds to different pitches	<ul style="list-style-type: none"> <li>• 6-30 months</li> </ul>
Conditioned Play Audiometry (CPA)	<ul style="list-style-type: none"> <li>• Requires a conditioned response (throw a ball in a bucket)</li> <li>• Conducted in a soundproof booth</li> <li>• Sounds presented via loudspeakers, insert phones, earphones, or small vibrator on the skull bone are varied in loudness and pitch by an audiometer</li> <li>• Degree of hearing loss is determined</li> </ul>	Audiogram - softest levels at which child responds to different pitches	<ul style="list-style-type: none"> <li>• At least 18 months</li> </ul>

# HEARING LOSS

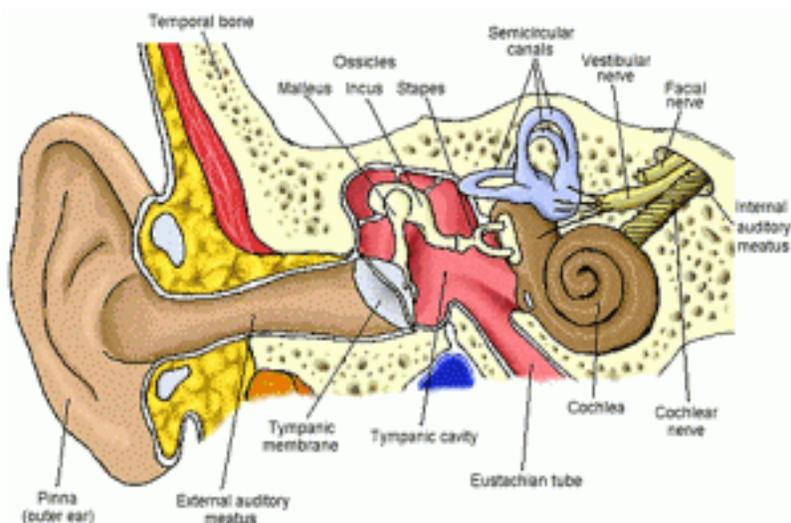


Testing a child's hearing and fitting him or her with hearing aids is a process, not a one-time event. Useful information will come from your observations of your child's response to sound while wearing hearing aids. Take notes and share this information with your audiologist. Understanding the type and degree of hearing loss allows your child to wear the hearing aids that work best for him or her.

- *How We Hear*
- *Learning about Hearing Loss*
- *Degree of Hearing Loss and Potential Effects*

## How We Hear

Sound travels through the air in the form of waves of varying frequencies. The frequencies of these waves determines the pitches of the sound we hear. Sound waves enter the outer ear (Refer to Diagram of Ear) through the external ear canal (#1) and are transmitted to the middle ear. Sound is directed to the eardrum (#2). The movement of the sound waves causes the eardrum to vibrate. This vibration causes three tiny bones to move back and forth in the middle ear. This mechanical vibration is then directed into the inner ear, the cochlea (#4). The cochlea is lined with a membrane that has thousands of hair cells on it. The purpose of the hair cells in the cochlea is to code them into an electrical signal that the brain can recognize. The hair cells have nerve fibers from the Auditory Nerve (#5) in them that change the mechanical energy of the sound wave into electrical energy. This electrical energy stimulates the nerve and sends a signal representing the sound wave into the brain.



The normally functioning ear responds to a wide range of frequencies (pitches) and intensities (loudness). Hearing loss generally reduces the intensity of a sound and can affect different frequency ranges, depending on the type and degree of hearing loss.

## Learning about Hearing Loss

***Your intervention team should assist you in learning about the nature of your child's hearing loss.***

There are different kinds of hearing loss. A child may have a conductive hearing loss, a sensorineural hearing loss, or a mixed hearing loss. All types of hearing loss reduce loudness of some sounds or eliminate the ability to hear different pitches or to hear speech clearly. The hearing loss may be in one ear (unilateral loss) or in both ears (bilateral loss). Conductive loss may be temporary; sensorineural loss is permanent. Another kind of hearing problem is called auditory dyssynchrony or auditory neuropathy in which the cochlea, middle and outer ear may be normal, but the brain does not process sound normally.

**Conductive Hearing Loss**

A conductive hearing loss occurs when there is a problem in the outer or middle ear. The most common cause of conductive hearing loss in young children is a middle ear infection called otitis media. Otitis media is defined as inflammation of the middle ear, usually with fluid, which may or may not be infected. The condition is very common in young children and is the reason for many visits to the pediatrician. It is important that ear infections be treated by a physician as quickly as possible to reduce potential hearing loss. Most children will experience some occurrences of middle ear infection. However, significant problems result from infections that last for several months, despite medical treatment.

There are also other types of conductive hearing loss in young children. Some children are born with a physical abnormality of the outer or middle ear. This may not be surgically treated until the age of 5-6 or later, leaving these children with a hearing loss until the surgery.

**Sensorineural Hearing Loss**

Sensorineural hearing loss occurs when the inner ear (cochlea) or the auditory nerve is malformed or has been damaged. There are many early causes of sensorineural hearing loss including loss of oxygen during birth, extremely low birth weight, inheritance, and maternal viruses or drug use (particularly in the first twelve weeks of pregnancy). A child may be born with normal hearing and acquire a loss due to a viral disease such as meningitis or exposure to certain drugs or for no identifiable reason. There are also some inherited conditions that are associated with progressive sensorineural hearing loss (loss of more hearing over time). Children with sensorineural hearing loss need to receive appropriate amplification and audiological management as soon as the hearing loss is identified. Regardless of the degree of hearing loss, or if the hearing loss is present in only one ear, audiological management should include ongoing auditory testing and follow up, referral for related medical follow-up, fitting and trial of hearing aids, and monitoring of the effectiveness of amplification and communication development.

**Mixed Hearing Loss**

When a child has both a conductive and a sensorineural loss in the same ear, it is called a mixed hearing loss. Children with permanent sensorineural hearing loss are as susceptible to middle ear infections as children with normal hearing and may add a conductive hearing loss to their existing sensorineural hearing loss. A child's pediatric audiologist should regularly test all kinds of hearing loss as part of the child's ongoing audiological management.

Research clearly shows that a communication options should not be based only on the degree of hearing loss.

## Degree of Hearing Loss and Potential Effects

<b>DEGREE OF LOSS</b>	<b>POTENTIAL EFFECTS</b>
<b>26–40 dB Mild</b>	May have difficulty hearing faint or distant speech. A child with a mild loss may miss up to 10% of the speech signal when the speaker is at a distance greater than three feet, or if the environment is noisy. Likely to experience some difficulty in communication and educational settings. Consider need for hearing aids and intervention.
<b>41-55 dB Moderate</b>	Understands conversational speech at a distance of 3-5 feet. Amplification may enable listener to hear and discriminate all sounds. Without amplification, 50% to 100% of the speech signal may be missed. Intelligibility of speech may be affected unless optimally amplified.
<b>56-70 dB Moderately Severe</b>	Conversation must be very loud to be heard without amplification. A 55 dB loss can mean 100% of the speech signal is missed in a typical conversational situation. When amplified, may have difficulty in settings requiring verbal communication, especially in large groups. Delays in spoken language and reduced speech intelligibility expected without intervention and amplification.
<b>71-90 dB Severe</b>	If loss is pre-lingual, spoken language and speech may not develop spontaneously, or could be severely delayed. Without amplification, is aware of loud voices about one foot from the ear and is likely to rely on vision for communication. With consistent use of amplification, parent attention to communication strategies, and an effective communication environment, language development and speech may develop to be normal or near normal.
<b>91 dB or greater Profound</b>	If loss is pre-lingual, spoken language and speech will not develop spontaneously. Without amplification, relies on vision rather than hearing for communication and learning. Potential candidate for the cochlear implant. With consistent use of cochlear implant or amplification, committed parent, auditory-oral or auditory verbal communication techniques or a communication system like cued speech, language development and speech may develop to be normal or near normal.

# LANGUAGE AND COMMUNICATION



Language can be verbal, non-verbal, or written. The development of a rich and vibrant language for a child with a hearing loss is a key component to ensuring social, emotional, and cognitive growth. Language opportunities for a child with a hearing loss range from sign language to speech. These languages include a variety of methods or options known as “communication opportunities” to build language. As a parent, you should become educated on all the opportunities before making a decision for your child. It is important to remain flexible and open-minded to change when it is necessary. For every child with a hearing loss, family involvement is a key factor in the success of language development and communication.

- *Communication Building Blocks*
- *Communication Features*
- *Communication Opportunities*
- *How Does Language Develop?*
- *What are Some Communication Tips?*

## Communication Building Blocks

### **Language Building Starts With Communication:**

A smile, a cry, a gesture, a look – all communicate thoughts or ideas. It can take many repetitions of a sign, gesture, look, word, phrase, or sound before your child begins to understand. Communication surrounding your child is the basis for language development. Two-way communication, responding to your child and encouraging your child to respond to you, is the key to your child’s language development.

Even with a 25 – 40 dB hearing loss or hearing loss in just one ear, your child will not hear as well when a person is speaking from another room or in a noisy car. Conversations and pieces of language will not be overheard. Although your child appears to “hear”, the fullness of language and social skills may not be fully understood. Hearing aids can help, but will not solve all of your child’s difficulties hearing and understanding soft or distant speech. No matter what the degree of your child’s hearing loss, you need to learn how to adapt your communication style to meet the needs of your child.

There are different ways to communicate and different ideas about communication. Technology has expanded communication options for young children with hearing loss. Choosing one manner of communication or several over another is a personal decision made by the family and does not need to be totally dependent upon a child’s amount of hearing loss.

**IT’S NOT ABOUT HEARING LOSS, IT’S ABOUT COMMUNICATION**

### **Taking the first steps to foster communication development:**

As you think about how your family communicates now and how you would like to communicate with your child in the future, you are thinking about choosing building blocks of language. The best way to decide which communication features to use for your family is to ask questions and talk to adults who are deaf or hard of hearing and other families with children who have hearing loss. Discuss, read, and obtain as much information as you can about the different ways to communicate with a child who has a hearing loss. You may want to contact organizations for the deaf or hard of hearing or read books describing options in communication opportunities. Organizations and books are listed in the Resource Section.

Consider these questions when researching communication opportunities:

1. Have you educated yourself on the various approaches on language acquisition via sign language and listening and speaking?
2. Are you willing to remain flexible and open-minded to the various communication opportunities?

3. Have you considered language and communication opportunities that are in the best interest of your child? Will these opportunities diminish communication breakdowns and increase your child's ability to express his/her feelings and concerns and participate in the world of imagination and abstract thought?
4. Do you understand what it takes to be committed to ensuring your child acquires a fully accessible language so that they may live an enjoyable and meaningful life as an equal member of your family? Are you and your family committed to extending the extra effort to make it happen?

### **Choosing Communication Building Blocks:**

All children develop language skills over time. It is through the consistent daily practice of language in all activities that children become effective communicators. Success for young children with hearing loss is measured by the child gaining at least one month in language skills for every month of early intervention. Parents are often asked to complete a check-off language ability list every 6 months that allows communication growth to be monitored. If there is a bump in the road and your family or child is not moving forward in using language at the expected rate, you can consider another path or a combination. Consultation with your child's team of professionals and other parents of children with hearing loss will help you better understand what some of these paths may be like for your child.

**One month of language development growth for every month of early intervention!**

Each child's hearing loss is unique. When making decisions for interventions for your child, you must understand the nature of his or her hearing loss. Your child's audiologist and early intervention service provider can help you understand your child's hearing ability.

### **Features of Language**

Receptive language refers to the words or language a person understands. Expressive language refers to how a person is able to share ideas or feelings. Factors that may impact expressive language development include pragmatics, content and form.

Pragmatics refers to the social use of language. The content of a language refers to meaning.

The arrangement of how words are put together to make sentences is referred to as syntax. English and American Sign Language differ in the order in which words or concepts are placed in a single sentence. Spoken English is somewhat different from written English in the way in which ideas and feelings are presented. All of these features are important for parents to understand when working towards building their child's language.

### **Communication Opportunities**

Creating a strong foundation in language means that various building blocks and educational techniques will need to be used in conjunction with each other to create that foundation. By being well-versed on the latest methods of building strong language foundations in deaf and

hard of hearing children, parents can make educated decisions on what best meet the needs of their child.

A child benefits the most when caregivers are willing and able to consistently commit to meeting their child's communication and developmental needs. This may mean deaf language role models and other language development professionals become an on-going part of the parent's training and their child's language development. Communication opportunities will not result in successful learning if caregivers and family members do not consistently surround themselves and their child with the necessary support to achieve successful outcomes. When some part of language learning doesn't work for the child, the parents will need to be ready to adapt and change the language building blocks so that their child does not fall behind in their social, emotional, and cognitive development."

The five communication opportunities that will be described include American Sign Language (Bilingualism/Bi-modal), Auditory-Oral, Auditory-Verbal, Cued Speech, and Total Communication.

### **American Sign Language (ASL) Bilingualism/Bi-Modal**

American Sign Language, or ASL, is the language of the American Deaf Community. This complete visual language does not require the use of spoken words or sounds. ASL is not a way of using gestures to represent English. ASL has its own vocabulary and all of the language components of a true language, including grammar and sentence structure. It is a completely distinct language from any spoken language, including English.

ASL is associated with Deaf culture including the history, language and community of people who see themselves as distinct in their uniqueness. Deaf culture also includes its own humor, theater and art. There are many leadership, athletic, and social associations and organizations within the Deaf community.

As a visual language, very young infants develop the basics of ASL, just as hearing children pick up the basics of a spoken language. ASL manipulates space, movements, facial expressions and signs to present information. Emotions, philosophical ideas and other abstract concepts can be fully conveyed in American Sign Language. Just as hearing people communicate effortlessly in their native spoken language, the same applies to deaf people...they can easily and effortlessly communicate with other fluent users.

Bilingual incorporates the concept that all people who use a visual language, such as ASL, can also be fluent in other languages, such as English in its written and/or spoken form. Bilingual education is designed to give children with hearing loss fluency in two languages – American Sign Language (ASL) and English and/or the family's native language. ASL is usually taught as the child's primary or first language. English or the family's native language is taught as the child's second language focusing on the written

and/or spoken forms. Bilingualism also seeks to provide children with knowledge about and acceptance of two cultures – Deaf and hearing.

Bi-modal refers to using ASL/English bilingualism to gain access to the modality of audition. This is done by applying ASL to the concepts of audition. It is not simultaneous communication.

Fingerspelling is also known as a visual alphabet and is a component of ASL. Each of the letters of the alphabet has a distinct hand-shape. Many of these hand-shapes were formed to look similar to the written form of the alphabet letters. Finger-spelling is used mostly as a means to introduce new or unknown vocabulary words to people that sign, as not all words have defined signs. This is especially true of proper names or specialized vocabulary, such as in the sciences.

Simultaneous Communication is signing and talking at the same time. Oftentimes when attempting to speak English and sign ASL, there is a communication breakdown because of the impossibility of using two languages at the same time. It is often used between a hearing person and a deaf person in the form of “contact communication”. It is also used in conjunction with Manually Coded English systems to develop speech.

There are a number of communication techniques that are visible representations of spoken English and are not true languages. Manually Coded English (MCE) is a system of signs (many of which are borrowed from ASL) presented in English word order. There are several manually coded English systems including Seeing Essential English (SEE 1), Signing Exact English (SEE2), and Signed English. Signs that are used without full coding of the English language or the use of full conceptual ASL signs are considered to be Pigeon Signed English (PSE).

### **Family Responsibility**

In order to become fluent in ASL, a child will need to have access to deaf or hearing individuals who use ASL. Most hearing parents are not fluent in ASL yet they can learn it alongside their child with assistance from deaf mentors, classes in ASL, and involvement in social activities with others who use ASL. Schools for the Deaf as well as Deaf Education Programs offer unique opportunities for hearing parents to learn ASL while, at the same time, providing their deaf child full exposure to ASL in an accessible environment in order to gain fluency. Some families find it immensely helpful to join together with one or more deaf adults to introduce ASL and Deaf culture to their child and family. ASL training and education about Deaf culture is important in order for the family and caregivers to become fluent in the language and sensitive to the visual needs of their child. Parental motivation and involvement in the process makes language development easier for their deaf child.

### **Auditory-Oral and Auditory-Verbal Methods**

People with hearing loss have different degrees of residual, or useable, hearing. Some people labeled as “deaf” have limited hearing ability that may or may not respond to

amplification and may not result in meaningful perception of sound. With full use of residual hearing via hearing aid use, spoken English may be learned through constant use of spoken language in the home accompanied by special attention to providing language and listening experiences. The maximum possible use of audition through optimal amplification is a key to success of the Auditory-Oral and Auditory-Verbal methods. A strong working relationship with an audiologist is vital. Individuals who are most successful with the Auditory-Oral and Auditory-Verbal based approaches have residual hearing, through the use of hearing aids or a cochlear implant. Auditory training instructs the family in how to help the child learn to listen and to understand what is heard.

People with hearing loss have different degrees of residual, or useable, hearing. Some people labeled as “deaf” have limited hearing ability that may or may not respond to amplification and may not result in meaningful perception of sound. With full use of residual hearing via hearing aid use, spoken English may be learned through constant use of spoken language in the home accompanied by special attention to providing language and listening experiences. The maximum possible use of audition through optimal amplification is a key to success of the Auditory-Oral and Auditory-Verbal methods. A strong working relationship with an audiologist is vital. Individuals who are most successful with the Auditory-Oral and Auditory-Verbal based approaches have residual hearing, through the use of hearing aids or a cochlear implant. Auditory training instructs the family in how to help the child learn to listen and to understand what is heard.

### **Auditory- Oral**

The auditory-oral program teaches babies and young children who are deaf or hard-of-hearing to use whatever hearing they have. They also use lip reading (speech reading) and gestures to understand and use spoken language. This program includes building blocks such as Natural Gestures, Listening, Speech (Lip) Reading, and Speech.

Auditory-Oral training emphasizes maximum use of residual hearing through hearing aids, FM systems, cochlear implants and auditory training to develop speech and communication skills. Unlike the Auditory-Verbal, Auditory-Oral includes the exclusive use of speech reading and natural gestures. Manual forms of communication, such as Manually Coded English and American Sign Language, are not encouraged. Natural gestures and body language are accepted.

Auditory-Oral consists of four main communication features: speech, audition, speech reading, and gestures or body language. It relies on enough residual amplified hearing to allow the child to understand his or her voice for monitoring of speech production (auditory feedback loop). The greater the amount of residual hearing an individual has, the better the chance for acquiring listening and speaking. Successful outcomes are tied to optimal amplification of residual hearing or use of a cochlear implant and a strong working relationship with an audiologist.

**Family Responsibility**

Since the family is primarily responsible for the child's language development, parents are expected to incorporate learning techniques, learned from therapists, into the child's daily routine and play activities. The primary caregiver will have the responsibility of incorporating these techniques into the child's daily routine. The family is responsible for having the child consistently use the hearing aid, FM system and/or cochlear implant. Consistent meaningful listening and language (auditory input), is required for a child to develop speech and language skills in the Auditory-Oral option.

**Parent/Caregiver Training**

Parents need to be highly involved with their child's early interventionist, audiologist, therapists, or teachers, to carry over learning techniques to the home and create an "oral" learning environment. Every effort must be made to incorporate these activities and environmental requirements into the child care situation if there is no at-home parent. A child will need to undergo many hours of consistent and on-going speech and listening therapy. Careful monitoring of language and speech development is necessary.

**Auditory Verbal**

Auditory Verbal training uses the child's residual hearing, hearing aids or cochlear implants, and teaching strategies to encourage children to develop listening skills so they can understand spoken language and communicate through speech. The focus is on development of speech and language through hearing. Speech reading, signing, and natural gestures and body language are discouraged. Auditory-Verbal consists mainly of two communication features: audition and speech.

In therapy, the child is expected to rely on hearing (audition) alone during specific one-on-one teaching times using a trained therapist with parents present. Use of hand cues during formal teaching times is used. These hand cues are: the therapist, parent, or caregiver covering his/her mouth when the child is looking directly at the adult's face; the adult moving his or her hand toward the child's mouth as a prompt for vocal imitation or as a signal for turn taking; and the adult "talking through" a screen placed in front of the speaker's mouth. More subtle signals such as encouraging the child to look at something other than the speaker's mouth when speaking and naturally covering the mouth when speaking are also used. It is not expected that the parents or caregivers would cover their mouths during all daily living activities outside of the direct instruction time.

**Family Responsibility**

Parents need to be highly involved with the child's teacher and/or therapists in order to learn training methods and carry them over to the home environment. The child is trained to rely on listening carefully to spoken language (such as English or the family's native language). The child is expected to learn to fill in missing language information from experience and familiarity with the language. The use of hearing aids or cochlear implants is necessary for a child to learn to listen and develop speech and language through Auditory-Verbal techniques.

## **Cued Speech**

Cued Speech is a system of eight hand shapes that represent groups of consonant sounds, and four hand placements that represent groups of vowel sounds, used with the natural lip movements of the speaker. The hand shapes and placements are grouped in sets that do not look alike on the lips, to make speech visible and clear to the cue-reader.

Cued Speech is not a language and must accompany speech. Cued speech is used as a tool for speech reading spoken languages. This system is believed to encourage the development of reading through encouraging a child to learn the spoken language as his first language.

Parents of young deaf children are encouraged to use voice when they cue in order to take advantage of any residual hearing their children have. Cued speech consists of four main communication features: Cued speech hand shapes, speech reading, speech, and the use of residual hearing. Use of personal amplification such as hearing aids, FM systems, or cochlear implants is also important with this approach.

In learning to read and write, the goal in using cued speech is increasing the ability to phonetically sound out words. The rhyme and rhythm of English, idiomatic expressions and tongue twisters can all be appreciated by individuals who use this technique.

### **Family Responsibility**

Parents are the primary teachers of cued speech to their child. They are expected to cue at all times while they speak. Consequently, at least one parent (and the primary caregiver if there is not an at-home parent), and preferably all caregivers must learn to cue fluently for the child to develop age-appropriate speech and language.

### **Parent/Caregiver Training**

Cued speech can be learned through classes taught by trained teachers or therapists. Although the hand shapes can be learned during a long weekend training session, a significant amount of time must be spent using and practicing cues to become proficient. Many parents find it fairly easy to learn cued speech in a short time. Intensive 3 to 7 day workshops equip a person with enough knowledge to begin to use cued speech. Continued use and practice over several months to a year will often be enough to become proficient with cued speech.

### **English Sign (MCE)**

There are a number of communication techniques that code the English language visually. Manually Coded English (MCE) is a system of signs (many of which are borrowed from ASL) presented in English word order. MCE is a visible representation of spoken English and is not a language. There are several manually coded English systems including Seeing Essential English (SEE 1), Signing Exact English (SEE 2), and Signed English. Signs that are used without full coding of the English language

or the use of full conceptual ASL signs are considered to be Pigeon Signed English (PSE).

### **Gestures**

Natural gestures and body language consist of things that you would normally do for a child to help him or her understand your message. For instance, if you wanted to ask a toddler if he wanted to be picked up, you might stretch your arms toward him and ask “Up?”. For an older child you might gesture to him as you are calling him to come inside. Likewise, if you are expressing unhappiness about a teenager’s messy room, you might place your hands on your hips and show a concerned facial expression as you are delivering your message. These are examples of natural gestures and body language.

### **Simultaneous Communication**

Simultaneous Communication is signing and talking at the same time. It is often used between a hearing person and a deaf person in the form of “contact communication”. It is also used in conjunction with Manually Coded English systems to develop speech. Oftentimes when attempting to speak English and sign ASL, there is a communication breakdown because of the impossibility of using two languages at the same time.

### **Speech**

Emotion is expressed in the patterns of speech. Changing pitch at the end of a spoken statement typically means that a question has just been asked. Pitch, rate, and loudness all vary as we speak and can change depending upon the words preceding and following. These variations may be difficult or not possible to perceive for the person with hearing loss. It can take intensive work and time for a child with hearing loss to be able to discriminate these tiny speech differences through hearing alone or in combination with speech reading. Technological advances in hearing aids and cochlear implants may allow many people who have a profound hearing loss to access speech through hearing or audition.

### **Speech reading**

Speech reading, or lip-reading, is a technique by which a person attempts to understand speech by watching the speaker’s mouth and facial expressions. Some of the sounds in the English language can be understood by watching the mouth, but many cannot. Only 30 - 40% of the English sounds are visible. Much of the meaning of conversation is figured out through context and educated guessing. Not all listening environments are ideal to speech reading. Men with facial hair, people who chew gum, cover their mouth, or turn away when they talk and people who barely move their mouth when speaking are very difficult to speech read.

### **Vibro-Tactile**

Vibro-tactile uses one of the natural senses – touch – to convey meaning. A child without hearing or who has very little residual hearing will turn to the source of vibration or even air movements in his or her environment. Some children who have little or no hearing can appear to inconsistently be turning to sound, when in fact, they feel vibrations through the floor, furniture, or air movements. Vibro-tactile senses can be

increased through the use of Vibro-tactile aids that convert sound into vibration patterns. Vibro-tactile devices are sometimes used to train children to attend to the presence of sound in their environment. Our sense of touch and sensitivity to vibration is not an efficient replacement for the high discrimination ability of human hearing or sight. Vibro-tactile is a technique used with other communication features, and not as a stand-alone communication method.

Normally hearing children absorb the language experiences that surround them and develop communication skills, with little apparent “teaching” needed from adults. Extra effort is needed by family members and caregivers to help a child with hearing loss learn language. It is through the daily exposure and practice of language in all activities that children become effective communicators.

Every child has areas of strength and non-strength, just as every family has different communication dynamics. Only you will know what feels right as you select communication features to match your child and family’s needs. The child’s personality, learning style, persistence, and motivation all will play an important part in communication growth. These are also qualities that we discover about our children as we interact with them in many situations. Hearing evaluations need to be ongoing, as your child gets older in order to monitor his or her hearing and related listening devices. The communication features you select when your child is very young may or may not fit well with these personality qualities and the hearing loss information that becomes apparent when your child is older. If hearing loss changes, the amount and type of amplification may need to change as well. The need to adjust communication features or options is not unusual as parents learn more about their child.

## **Total Communication**

Total Communication (TC) supports the use of all modes of communication and language as needed in differing contexts. This includes ASL and more English-based systems of signing (i.e., Signing Exact English, Sign-Supported Speech, and Conceptually Accurate Signed English), spoken English, mime, facial expression, and gestures. Some programs may also incorporate Cued Speech (see below). The intention of this philosophy is to provide a deaf or hard of hearing child with any and all strategies necessary to support his or her development of communication and language. It does not intend that all strategies be incorporated equally or used at the same time. A common form of TC in deaf education is simultaneous communication (“simcom”)-the use of spoken words simultaneously with a signed version of all or part of the spoken utterance. TC programs also include strategies that bridge ASL and English, such as “sandwiching” the languages (sign it-say it-sign it, or say it-sign it-say it) or “code switching” (moving between ASL and English either through spoken language or print).

From:

[http://www.gallaudet.edu/clerc\\_center/information\\_and\\_resources/info\\_to\\_go/educate\\_children\\_%283\\_to\\_21%29/resources\\_for\\_mainstream\\_programs/language\\_and\\_communication/total\\_communication.html](http://www.gallaudet.edu/clerc_center/information_and_resources/info_to_go/educate_children_%283_to_21%29/resources_for_mainstream_programs/language_and_communication/total_communication.html)

**Family Responsibility**

Preferably all family members and caregivers should learn the chosen sign language system in order for the child to develop age-appropriate language and the ability to communicate fully with his/her family (and within the child care setting if there is no at-home parent). It should be noted that a parent's acquisition of sign vocabulary and language is a long term, ongoing process. As the child's expressive sign language broadens and becomes more complex, so too should the parents in order to provide the child with an appropriate language learning environment. The family is also responsible for encouraging consistent use of amplification.

**Parent/Caregiver Training**

Parents must consistently sign while they speak to their child (simultaneous communication). Sign language courses are routinely offered through many community colleges and other adult education providers. Many books and videos are widely available. To become fully fluent, signing must be used consistently and become a routine part of daily family communication.

Communication opportunities are all about building a solid language in order to be a successful communicator.

**How Does Language Develop?**

It is helpful for families to understand the various aspects of language development in order to help their child. Babies develop at different speeds and these suggestions may be helpful regardless of the age of your child.

***Engage in frequent, positive communication with your baby to help language develop faster. Take time to respond to your baby's needs, to let your baby know by your smiles and your touch that he or she is loved.***

All babies need to develop positive bonds with parents or caregivers. These bonds develop, regardless of the hearing status of your baby, by responding to your baby's needs. Since babies cannot tell us what they need, we must observe them carefully, sometimes guess, and then try different things to satisfy them. Even though we sometimes have trouble figuring out exactly what a baby wants, the fact that we keep trying teaches babies how important they are to us. Playing with your baby by exchanging smiles, by gentle touches, and with little games like "peek-a-boo" constitute more than "play." It is the natural way to strengthen the bond between parent and baby. It is also a natural way to communicate with your baby and build your baby's understanding of communication. Babies who feel loved and secure have extra energy available for learning language and other skills.

***Use as many senses as you can to send messages to your baby with a hearing loss. Emphasize touching games. Move your body and face and hands around in front of your baby. Emphasize your facial expressions even more than usual. Talk and sign to your baby.***

Without having to think about it, parents use special ways to communicate with young babies. Parents tend to raise the pitch of their voice when they talk to babies. They talk in a "sing-song" manner with a lot of rhythm. They often repeat phrases or sentences several times, giving the baby a chance to anticipate and know what will be said next. Parents also gesture a lot to their babies, often making hand movements in rhythm with their words. They use facial expressions that are usually positive or happy and they exaggerate those facial expressions compared with those they use when talking to others. Parents also touch and stroke their babies frequently. Even if a baby cannot hear the parents' speech, the baby can receive the messages sent through the other senses.

***Be Responsive. Follow your Baby's Lead. Notice where your baby is looking or what your baby seems to be interested in. Talk about that object or activity.***

Babies will be more interested in communicating when they can set the "topic" of conversation. Even as adults, we don't like to communicate with people who seem to ignore our own ideas and interests. Babies and young children can get the same feeling if their conversation partners keep "changing the subject" instead of following up on their interest. This is the case even when the child's interest is shown through actions instead of any kind of real language.

Language learning occurs more quickly when parents talk about an object or activity that the baby exhibits an interest in. Here are examples of responding and of topic changing:

- Mother ***responds*** or follows child's topic: Child looks at toys spread around on the floor, and then picks up a baby doll. Mother says or signs, "Oh, a baby. You want to play with the baby?"
- Mother ***changes*** topic: Child looks at toys spread around on the floor, and then picks up a truck. Mother, also looks around at toys, picks up a cup and saucer. "Here, Honey," mother says or signs, "Let's have a tea party. Do you want a drink?"

Learning a new word is a cognitive or thinking task that requires mental energy. When a child is already thinking about an object or activity, she has only to connect a new word with that object or activity. It is a one-step task.

In the second situation, when the mother redirects the child's attention, the word-learning task becomes more complex. It involves at least three steps: the baby must figure out that the adult wants her to notice something new, then figure out exactly what and where the new thing is, then finally make the connection between the new word and that object or activity.

***Pay attention to the baby's arm, leg and body movements. These movements can tell us when the baby is excited. They might also show us that the baby is trying to communicate.***

When playing with and responding to your baby, it is important to notice the movements of his or her body, especially the arms and legs. Babies often show feelings and readiness for play by these movements.

***Respect the baby's right to stop playing or communicating. Sometimes babies look away or even begin to fuss when they have had too much playing, too much stimulation.***

It is important to keep in mind that babies, like adults, need "down time." When young babies play or communicate for a long time, they can become tired or even too excited. When this happens, babies often look away from the communication and lose their happy facial expressions. The best way to respond to this behavior is to wait quietly for a short time to see if the baby looks back to re-start the communication. Some babies are more sensitive than others and will need to rest more often.

***Especially with a young baby, often move your hand or body so your baby can see your communication while still looking at a toy or activity.***

During the early months of life, babies spend a lot of their time watching the person communicating or playing with them. However, by five or six months of age, most babies begin to display a great interest in objects. They want to explore objects and toys by looks and manipulation. They spend more time looking at objects and less time looking directly at parents and other people who want to communicate with them. This presents special challenges for persons communicating with babies who have hearing loss. A child with hearing loss will hear spoken language only partially, in a distorted way, or perhaps not at all. The child needs to see the message in order to understand it. It is helpful for the child to be able to see the face and body of the person who is sending the message. The child can get information from mouth movements, facial expression, and body language in addition to information from sound.

***Move an object (such as a toy) in front of your baby and then move it up toward your own face. When your baby can see your face and the object, communicate about it.***

Another way to help a baby see communication while looking at an object is for you to move an object in front of your baby. This almost always gets their attention. Then you can continue to move the object, bringing it up near your face. When your baby can see you and the object at the same time, you can communicate about the object. This is most effective when you move an object that you and your baby have been playing with, or move an object related to one your baby is playing with. That way, you can use language that is responsive to your baby's interest instead of changing the topic.

***When your baby is amplified, use an auditory signal (such as calling his or her name) first to get your baby's attention. Wait a few seconds. If he or she does not respond, call your baby's name again. Wait a few seconds. Gesture to him or her, or tap him or her lightly on the shoulder to get his or her attention. When your baby looks at you, talk with him or her.***

A good way to teach your baby his or her name is to say/sign his or her name and wait for a response. Say/sign the name again and wait for a response. If your baby does not look at you, then gesture or get in his or her line of vision to get his or her attention. When your baby is looking at you, repeat his or her name again and say/sign something like "Julia, that's you". The more often your baby hears his or her name, the faster it will be learned.

***Tap on an object, perhaps several times, before and after you communicate something about it. This helps your baby know what your communication is about.***

Pointing to or tapping directly on an object before saying/signing something about it shows your baby exactly what your language means.

***Relax, wait for your baby to look up on his or her own. You do not have to fill every moment with communication and language. It is more important to follow up on your baby's interests and make sure he or she can see your communication.***

One of the best ways to ensure that a baby takes note of communication is to wait for your baby to look up, then quickly say/sign something to your baby. This may require a lot of patience, because some babies will not look up. But, when you communicate in an interesting and responsive way during the times that your baby does decide to look up, it is like giving your baby a reward. It encourages looking up in the future.

***Use very short sentences- one, two, or three words at a time, plus pointing or tapping on objects. Remember to allow your baby time to process and understand your words.***

Use short and simple sentences with your babies. Between about 9 and 15 months of age babies start to show that they understand language, and most babies themselves begin to produce language. Without really thinking about it, their parents give them a "model" of language that is easy to understand and easy to learn. Then, when the babies begin to talk more, parents gradually move onto more complicated language.

***Repeat words or short sentences several times. Always give your baby time to process the sentences. Also tap on objects or point to activities to show your child what you are communicating about.***

This gives your baby several chances to notice and recognize the language patterns. Babies seem to find repeated language interesting. Tap on objects, point, use interesting

facial expressions, and bring the object near your mouth to help your baby see and pay attention to language.

*Excerpted and adapted from “A Good Start: Suggestions for Visual Conversations with Deaf and Hard of Hearing Babies and Toddlers”, Dr. Patricia Spencer, cc 2001 Laurent Clerc National Deaf Education Center, Gallaudet University*

### **What are Some Communication Tips?**

Communication with your child is very important! Two-way communication, responding to your child and encouraging your child to respond to you, is the key to your child’s language development. Here are some tips that may help.

- Name **objects** in the environment as you see or use them.
- Talk about the **actions** you or your child are doing or seeing.
- Talk about **how** things look, feel and sound.
- Talk about **where** objects are located. You will use many prepositions such as in, on, under, behind, beside, next to, and between.
- Compare how objects or actions are **similar** and **different** in size, shape, smell, color, and texture.
- Talk about the **steps** involved in activities as you are doing them.

Tell familiar **stories** or stories about events from your day or your past. Keep the stories simple for younger children and increase the complexity as the child grows.

### **A BRIEF LIST OF INTERNET RESOURCES ON COMMUNICATION**

[www.agbell.org](http://www.agbell.org)

Alexander Graham Bell Association

[www.jtc.org/](http://www.jtc.org/)

John Tracy Clinic

[www.handsandvoices.org](http://www.handsandvoices.org)

Unbiased communication support for families

American Society for Deaf Children  
Resources for parents English, French  
Chinese, Spanish

[www.sign2me.net](http://www.sign2me.net)

Benefits of teaching sign language to babies

[www.cuedspeech.com](http://www.cuedspeech.com)

National Cued Speech Association

<http://www.nidcd.nih.gov>

Documents to download

[www.listen-up.org/](http://www.listen-up.org/)

Specializing in information for the deaf and  
hard of hearing

<http://v12.gallaudet.edu/>

Gallaudet University

Visual language and learning

Communication Building Block information adapted from

<http://www.cdc.gov/ncbddd/hearingloss/parentsguide/building/index.html> (2014)

# INTERVENTION TEAM



Children with hearing loss are likely to develop social, emotional, or developmental delays when no intervention is received. When your child has a hearing loss, necessary audiological management and care to communicate with the child effectively should be provided early in life if delays related to hearing loss are to be prevented. Florida's Early Steps Program provides family-centered early intervention services. Your family is the most important part of your child's life. Services are designed to help you meet the needs of your child at no or minimal cost.

- *Early Steps - Florida's Early Intervention Program*
- *Individualized Family Support Plan*

*Quality intervention has a team approach with the family as the most important member.*

### **EARLY STEPS - Florida's Early Intervention Program**

Early Steps provides early intervention services in Florida and assures that services and supports are available for young children with special needs from birth to 36 months. A child with a diagnosed hearing loss has an established condition and is eligible for early intervention services in Florida. Any child may be referred to Early Steps upon the identification of a hearing loss. Physicians, audiologists, parents, caregivers, teachers, childcare providers, or anyone else who may have a concern about a child can make referrals.

Funding for Early Steps is made possible through the State of Florida and Part C of the Individuals with Disabilities Education Act (IDEA). IDEA is a federal program that helps Florida provide family-centered early intervention services provided in the natural environment. Federal funds enhance state and local resources.

### **Hearing Loss Criteria for Early Intervention Program Eligibility**

The degrees of hearing loss specified below place an infant or toddler at risk for developmental delays. Infants and toddlers with hearing loss of this degree or greater are eligible for audiological management (including provision of hearing instruments when appropriate) and family-centered early intervention services.

#### **Criteria**

1. Evidence of a documented permanent hearing threshold level of:
  - a. 25 dB or greater based on pure tone average of 500, 1000, or 2000 Hz unaided in one or both ears. (Air-bone gap not to exceed 10 dB HL unless there is evidence of anatomic malformation of the outer or middle ear.)
  - b. Air conduction thresholds, unaided in the better ear, greater than 25 dB HL at two or more frequencies in the high frequency range (2000, 3000, 4000, 6000 HZ) in both ears with air-bone gaps no greater than 10 dB HL.
2. Evidence of auditory dys-synchrony (auditory neuropathy) in both ears characterized by a unique constellation of behavioral and physiologic auditory test results.

### **Individualized Family Support Plan (IFSP)**

Once a child is determined to be eligible for Early Steps, an IFSP is developed. The IFSP is based on family concerns. It documents specific supports and services that are necessary to help meet the unique needs of the child and family in their daily life. A periodic review of the IFSP is conducted at least every six months and evaluated annually or more often at the family or team members request. The IFSP will typically include family training to assist families to learn more about:

- parent-child interaction strategies that maximize language development opportunities

- ideas to help your child maximize the use of his or her hearing
- how to use your child's hearing technology
- how to effectively communicate
- general development of infants and toddlers including social and emotional development
- opportunities to meet with other families who have children with a hearing loss
- opportunities for sibling support
- counseling support for families to discuss family issues related to your child's hearing loss
- communication development monitoring at least every 6 months
- hearing aid follow up checks with your child's audiologist
- hearing aids, earmolds and, when warranty runs out, hearing aid insurance
- how to prepare for a transition to new services once your child turns three years old

# HEARING TECHNOLOGY



No child is too young to have their hearing tested or to begin using hearing technology. Major advances are continually being made so that even children with a severe to profound hearing loss can have access to a surprisingly large amount of sound that can be used to develop language primarily through hearing. If you take advantage of technology as soon as your child's hearing loss is diagnosed, it will give your child the earliest opportunity to begin to learn about sound.

- ***Hearing Aids and Cochlear Implants***
  - *What is a Hearing Aid?*
  - *Why is it so Important for My Child to Wear Hearing Aids?*
  - *How do I Troubleshoot Hearing Aids?*
  - *How does a Hearing Aid Work?*
  - *What are the Different Types of Hearing Aids?*
  - *How do I Keep Hearing Aids in Place?*
  - *How often do We Need to Adjust Hearing Aids?*
  - *How often do Ear Molds Need to be Remade?*
  - *What is Available When a Hearing Aid Isn't Powerful Enough?*
  - *Who Decides Which--Hearing Aid or Cochlear Implant?*
  - *What Places in Florida Perform the Surgery for Cochlear Implants?*
  - *How does a Cochlear Implant Work?*
- *What Other Devices Might be an Option for my Child?*
- *What is the Relay Service?*

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## Hearing Aids

***Parents need to understand and manage the hearing aids and/or auditory equipment for their child.***

### **What is a Hearing Aid?**

We actually hear with our brains. Hearing aids are a way of delivering sound to a child's brain to allow him or her to grow the brain connections needed to learn to process and understand sound. A hearing aid is a device for the ear, which amplifies or makes sounds louder for a particular hearing loss. The goal is to provide enough amplification for a child to hear speech and environmental sounds at a comfortable level. When hearing loss is severe or profound (71 – 110 dB) it is very difficult for hearing aids to provide enough amplification for a person to be able to hear all of the speech sounds.

### **Why is it so Important for My Child to Wear Hearing Aids?**

Babies begin hearing in the womb before birth and within the first three months of life can tell the difference between voices and some speech sounds. A child born with a hearing loss is already behind in developing the skills needed to understand what sounds mean, including speech. The sooner amplification is worn by the baby throughout all waking hours, the better opportunity he or she will have to learn to understand sounds and to develop language and speech.

Even children with very mild (26 – 40 dB) hearing loss require consistent amplified sound to develop to their potential without social, behavioral or learning consequences. With every passing month without optimal amplified hearing, the child is at an increased risk for communication delays. With appropriate amplification in use and active family involvement in early intervention, a child can be expected to develop about one month of language for every month of early intervention. Without amplification, a child with hearing loss cannot be expected to develop verbal speech and language skills at the same rate or complexity.

Even if your child is deaf (hearing loss 90 – 100 dB or greater) the first step is hearing aids. Why? Because when babies are very young their brains are developing neural connections, pathways that allow different stimuli to be processed. If the hearing nerve and brain are not stimulated then the auditory portion of the brain will not develop. Similar to keeping the water dripping to prevent a pipe from freezing in cold weather, hearing aids worn by deaf children continue to stimulate the brain, even if the child is still not able to hear enough to perceive speech. A healthy, growing hearing nerve and brain provide your baby with more options in the future (see cochlear implants) if you become interested in exploring these possibilities.

Parents who do not have their child consistently wear amplification should consider visual communication options as the primary means of communication to develop language. Recent research has shown that babies with hearing loss, and no other disabilities, who receive appropriate intervention services prior to six months of age, have a high likelihood of having normal language ability upon school entry, regardless of the communication option used by the family.

### How do I Troubleshoot Hearing Aids?

Not surprisingly, hearing aids on children require daily maintenance by the adults in the child's life. The most common problems are the battery dies, moisture gets into the hearing aid, earmolds get clogged with wax, earmolds are outgrown, or the case of the hearing aid cracks. When any of these problems occur, the child is not hearing as well as he or she should. Parents should be sure to check with the audiologist for information and a demonstration of how to troubleshoot their child's equipment. A free hearing aid listening kit is available through the audiologist for children receiving Early Steps services.

### How does a Hearing Aid Work?

Sounds are picked up by a microphone and carried to a signal processor (amplifier) where they are made louder and shaped to match the hearing loss. The sound is then sent through the receiver and delivered by the earmold into the ear.

**Earmold:** a soft plastic custom-made piece that seals the ear to prevent sound leakage that causes feedback (whistling).

**tubing:** connects the earmold to the hearing aid. It is securely attached to the earmold and is detachable from the ear hook. It can be replaced if torn, cracked, or too small.

**Earhook:** hard plastic hook that supports the hearing aid on top of the ear; protects the receiver, and channels sound to the earmold. It may have a filter to further shape the sound for the hearing loss. It can be replaced if cracked or damaged.

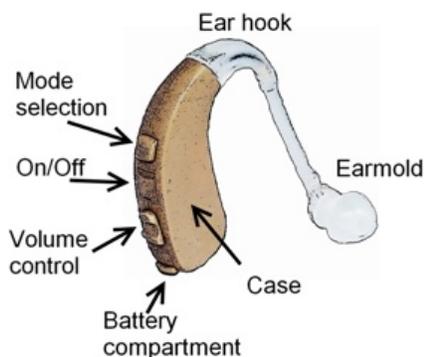
**Receiver:** sound speaker inside the hearing aid that opens into the earhook.

**Microphone:** collects sound for amplification through a small opening in the hearing aid case.

**Switch:** turns the hearing aid on/off. Usually O=off; T= telephone or FM system; MT= hearing aid microphone and FM system; M=microphone picking up sound around the hearing aid.

**Volume control:** usually a numbered wheel that changes the loudness of the sound. Typically, the smaller the number the lower the volume. Some hearing aids have automatic volume adjustments instead and no volume wheel.

**Battery Door:** holds the battery, which is changed every 1-2 weeks depending on power needed and # of hours the hearing aid is worn. Opening the door will turn off the hearing aid. Batteries are TOXIC if swallowed and tamper resistant doors are required for young children.



Hearing aid batteries are poisonous and should not be placed in areas where young children can reach them. If they are swallowed, call the **National Poison Hotline (800) 222-1222**.

## What are the Different Types of Hearing Aids?

**Behind the Ear Hearing Aids (BTE):** This unit has all the components of the hearing aid encased in a device that fits behind the ear. The signal is delivered to the ear by an earmold. The BTE hearing aid is the most common hearing aid recommended for young children.

**In The Ear (ITE):** These hearing aids are hard shelled and custom molded to fit in the bowl of the ear. Young children have ears that are too small for these hearing aids and their rate of growth would require frequent hearing aid recasing, leaving them without hearing aids for frequent intervals.

**In The Canal (ITC):** These hearing aids are hard shelled and custom molded to fit in the canal portion of the ear. They extend slightly out of the opening of the ear canal and are smaller than ITE aids. Again, young children have ears that are too small for these hearing aids and their rate of growth would require frequent hearing aid recasing, leaving them without hearing aids for frequent intervals.

**Bone Conduction Hearing Aids:** A specially adapted version of a behind-the-ear style of hearing aid. Children with a conductive hearing loss and/or malformed or missing outer ears that cannot be medically or surgically corrected use bone conduction hearing aids that typically consist of a small vibrator attached to a headband worn by the child.

**Transposition Hearing Aids:** This is a specialized hearing aid that takes high frequency (pitch) sounds and shifts them into the low frequency range of hearing so that they are audible to the person with residual hearing in only the low and mid frequency range. In this manner all of the speech sounds are represented audibly, although they would not sound normal to a person with hearing in the normal range.

**Vibro-Tactile Hearing Aids:** Frequently used as a way for children with little or no residual hearing to become aware that sound/speech is occurring around them. Some vibro-tactile aids have various sensors that relay high versus low pitch information.

### **How do I Keep Hearing Aids in Place?**

If you are having a problem with this, be sure to mention this to your audiologist right away. There are simple adjustments that can be made in the placement or length of tubing or in parts of the earpiece that may help. In addition, there are several devices that may help keep the hearing aids securely on your child's ear. One of these is a product called "Huggies." Another solution is to use double-sided cloth tape or toupee tape (check to be sure the tape does not irritate your child's skin). Some parents have found it useful to tie a small piece of dental floss from the child's hearing aid to a safety pin which is attached to the back of the child's shirt. This way, if the aid comes out of the child's ear, it will still be attached and the expensive hearing aid will not be lost.

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## **How often do We Need to Adjust Hearing Aids?**

Up to age three, hearing and amplification equipment should be monitored at least **every three months**. Children under the age of 6 months will require more frequent monitoring to replace earmolds as the child grows. During the preschool years (ages 3-5) audiological evaluations should occur **every six months** unless changes in responses indicate a need for an earlier check-up.

## **How Often do Ear Molds Need to be Remade?**

Young children's bodies, including their ears, grow at an incredibly fast rate and earmolds will need to be replaced quite often. There may be a need to remake the earmolds as often as every 3-6 weeks when a child is very young. As the child matures, his or her growth rate slows and the earmolds need to be remade less often. Earmolds must fit tightly in the ear or feedback (high pitch squealing) will occur. Although turning down the volume of the hearing aids reduces the feedback for a few days, it also reduces the strength of the speech signal the child hears. At the first notice of squealing, the parent needs to call the audiologist to schedule a time to make new earmold impressions. Once the impressions are made, it takes approximately 1-2 weeks for the earmold lab to make the actual earmolds. Waiting to have the earmolds remade can result in weeks of squealing hearing aids, or hearing aids with the volume turned down low. Early Steps can authorize monthly hearing aid follow up checks with the audiologist when a child is under a year old and every other month when he or she is 1-3 years old. The best way to deal with squealing hearing aids is to prevent the squealing from happening!

## **Cochlear Implants**

### **What is Available When a Hearing Aid Isn't Powerful Enough?**

Cochlear implants are designed to help children and adults with sensorineural hearing loss or "nerve deafness" become aware of sounds again or even for the very first time. Cochlear implants are an option for children as young as 12 months who are profoundly deaf in both ears; lack progress in the development of auditory skills; and have high motivation and appropriate expectations from their family. Children older than 2 years are potential candidates for cochlear implantation if they have severe-to-profound sensorineural hearing loss in both ears (nerve deafness); receive little or no benefit from hearing aids; and lack progress in the development of auditory skills.

A cochlear implant changes sound into electrical impulses, which stimulate the hearing nerve and can then be interpreted by the brain as sound. There is an adjustment period for the child while their brain begins to interpret and understand the sounds from the cochlear implant. The length of the adjustment period and how well a child will learn to use the sounds for communication and learning varies from individual to individual.

### **How Does a Cochlear Implant Work?**

A cochlear implant is a device that has two sets of components, external (those worn on the outside) and internal (those that are surgically implanted in the skull). The external components include a behind the ear microphone, a body-worn speech processor, and a transmitter worn on the scalp behind the ear. The internal components consist of a receiver, a

magnet anchored under the skin behind the ear, and wire electrodes set in the cochlea of the ear. In some newer models, the speech processor and transmitter have been combined into one unit and can be worn at ear-level (looks like a BTE hearing aid).

The cochlear implant receives sound waves through the external microphone and changes them into specially coded electrical energy in the speech processor. That signal is transmitted to the internal electrodes that stimulate the auditory nerve and sends a signal to the brain. A specially trained otolaryngologist conducts cochlear implant surgery at a specially designated hospital. After the surgery and short recovery period (one month), the implant is set (mapped) for the specific child. The mapping must be repeated on a regular basis to ensure that the child is hearing properly. Children with cochlear implants are evaluated and managed by pediatric audiologists trained in cochlear implant mapping and management.

1. The microphone of the speech processor receives sound.
2. The sound is analyzed, digitized and coded into a signal.
3. Coded signals are sent to the transmitter.
4. The transmitter sends the code across the skin to the internal implant where it is converted to electronic signals.
5. Signals are sent to the electrode array to stimulate the nerve fibers in the cochlea.
6. Signals travel to the brain where they are recognized as sounds that produce a hearing sensation.



### Who Decides Which--Hearing Aid or Cochlear Implant?

Children identified with hearing loss who are less than a year old will typically be fit with hearing aids. As the child reaches 6 months or so and if there is little or no response to sound or auditory development then the parents and the child's audiologist should come to a careful decision regarding amplification or cochlear implants. Hearing aids are required to be worn consistently a minimum of 3-6 months before cochlear implantation will be considered. Hearing loss in both ears almost always requires fitting of hearing aids in each ear. As more specific information about the hearing loss is obtained, the hearing aids will be adjusted. Cochlear implantation can occur in one or both ears. A member of a cochlear implant team adjusts the cochlear implant. The audiologist will perform tests with the hearing aids or cochlear implant on your child to further confirm the benefit of these adjustments.

### What places in Florida perform the surgery for cochlear implants?

Florida currently has five cochlear implant centers, the only places in Florida that are qualified to perform the necessary surgery for implantation and they are as follows:

1. All Children's Hospital in St. Petersburg
2. Children's Ear Nose & Throat Associates (CENTA) in Orlando

3. Nemours Children's Clinic in Jacksonville
4. UF Health Ear, Nose & Throat- Shands Hospital in Gainesville
5. University of Miami Miller School of Medicine in Miami

These places perform cochlear implant programming after surgical placement of a cochlear implant:

1. Jacksonville Hearing & Balance Institute at Center One in Jacksonville
2. Mayo Clinic in Jacksonville
3. Tampa Bay Hearing & Balance Center in Tampa
4. The Hearing & Balance Center in Winter Park
5. University of South Florida Cochlear Implant Center in Tampa

## **What Other Devices Might be an Option for my Child?**

### **FM System Hearing Technology**

Children who use hearing aids will have much greater difficulty hearing speech in the presence of background noise or when the speaker is at a distance greater than one - three feet away. For these situations, a wireless FM system may be recommended. An FM system has two primary components, the amplifier/receiver worn by the child and the microphone/transmitter worn by the speaker. The FM system is designed to amplify the signal from the microphone/transmitter so that it is louder than the signal received by the receiver/ microphone. In this way, speech from the speaker is always louder than any background noise that the child is hearing. Some children may use the FM system as the primary form of amplification while others may use it only in settings that are particularly noisy.

Even if an FM is used as the primary amplification, children should have time during the day when they listen through the environmental microphones rather than the FM microphone so they can develop sound localization skills. Early Steps can authorize an FM receiver for one ear and a microphone/transmitter. It is typical to do a trial period using the FM system for a few weeks to determine its benefit to the child and frequency of use by the family or other caregivers.

### **Telephone Amplifier**

This type of assistive listening device makes the telephone signal louder and may be used with or without a hearing aid.

### **Closed Captioning**

This assistive device is either attached to a television or built into a television to provide written text of the spoken words.

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## WHAT SHOULD I EXPECT?

### Setting Reasonable Expectations about Hearing Aid Wear

#### How much should my child wear his hearing aids at first?

- During the first few days of use, put the hearing aids on your child 3-4 times a day for 15 - 30 minutes each time.
  - If meals are one of your child's favorite times, put the hearing aids on as you feed him.
  - During other periods of hearing aid use, play with favorite toys, look at books, or sing nursery rhymes.
  - Your child will be distracted by these activities from the feeling of something new in his ears. He will be hearing your voice at the same time.
- Each day, increase the length of each period of use until the periods blend together and the child is wearing the aids full time during his waking hours. Your child should not wear his aids while he is sleeping.
- Talk with your audiologist and early intervention specialist to **set a date** by which your child will be using hearing aids full time.
  - One rule of thumb is: Full-time use during the child's waking hours **within three weeks of the initial fitting**.
  - *The sooner you establish full-time use of hearing aids, the sooner the child will be able to rely on hearing as a way of getting information.*
  - You can establish a schedule: First thing in the morning (or after a nap) we get you dressed, put your hearing aids on and have some breakfast (snack).

**"If your baby wears hearing aids only four hours each day, it will take six years to give him as much listening experience as a normally hearing infant accumulates in one year."**

(Stovall, D. [1982]. *Teaching Speech to Hearing Impaired Infants and Children*. Springfield, IL: Charles C. Thomas.)

### **What should I expect to see in the way of his response to sounds?**

Your child's age at the time hearing aids are first placed, the degree of his/her hearing loss, and the amount of amplification provided are all factors which will affect how your child responds to sounds when he first begins wearing hearing aids. Ask your specialist and audiologist how they think your child might respond to sounds.

### **Here are some descriptions of behaviors you may see.**

When you first put hearing aids on, some young children become very still as they hear voices for the first time. They do not know what voice is or what it means, but if they see their parents smiling at them and moving their mouths as this sound is occurring, they may be reassured that they are safe! Some children begin crying as the hearing aids are placed, so the first sound they hear is their own cry (though they don't know that's what it is). Some children are startled by this noise and stop crying to listen!

### **As you put the hearing aids on your child at home, you may see one or more of the following responses.**

- A baby up to the age of 5 - 6 months may startle to sounds or show surprise when a sound occurs by widening his eyes, starting to cry, stilling, ceasing crying or movement.
- A child older than six months may look up when a sound occurs then may look around. He has no idea what made the sound or what it means, but it is an unusual event for him if he is hearing for the first time. Be sure you show the child what is making the sound and repeat the sound. It is very important that the child start learning that sounds mean something or he may stop responding to them.
- A child with a profound hearing loss may receive sound at very soft levels. He may not give much indication that he is hearing, since he has not yet learned to listen for these soft sounds. Talk in normal tones within 6-12 inches of this child's hearing aids about things he is doing or seeing. Use lots of intonation in your voice; play with animals and vocalize the sounds they make. Use the gesture of pointing to your ear and then to his ear to indicate that, yes, he is hearing something, however faint.

### **What if he cries or pulls the hearing aids out?**

- Working through the child's resistance to having the hearing aids put on takes courage! *You must be convinced that the benefits the child will get from wearing hearing aids will outweigh the child's discomfort in adjusting to something new.* Your child does not yet know that the hearing aids will bring him sound. Talk and laugh with your child as you put the aids on - surely this can't be all bad if Mom is smiling and joking!
- The caregiver must be the one who makes the decisions about when the child's hearing aids are removed. When the child takes an aid off, calmly replace it and distract him with a toy or game. If it is close to the time when you would be removing his aids, play with him for at least five minutes

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before doing so, then tell him, "Time to take your hearing aids off."

- Remove the hearing aids without a lot of fanfare. Do not associate removal of the aids with expressions of relief or happiness.
- A normally hearing baby listens for about 10 hours a day, 365 days a year. That adds up to 3,650 listening hours per year!
- A normally hearing toddler or preschooler listens about 12 hours per day 365 days per year. That adds up to 4,380 listening hours per year.
- If a toddler or preschooler only wears amplification only at preschool (about 2.75 hours a day) it would take 9 years for the child to have as much listening experience as a hearing preschooler or a preschooler with hearing loss that wears amplification all waking hours (12 hours).

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**The day your child begins wearing hearing aids  
is the day you start helping him overcome  
some of the challenges created by hearing impairment.**

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Excerpts of What Should I Expect have been reprinted with permission from *For Families Guidebook (1997)*, Hearing & Speech Institute, Portland Or, and Talk Around the Clock, AG Bell Association for Deaf and Hard of Hearing (2003) (Reproducible materials for families.

**What is the Relay Service?****CALL 1-800-955-8771**

Telecommunications relay service provides full telephone accessibility to people who are deaf, hard of hearing or speech disabled. Specially trained Communication Assistants (CAs) complete all calls and stay on-line to relay messages either electronically over a Text Telephone (TT/TTY) or verbally to hearing parties. The toll free access number is 1-800-955-8771.

The service is available 24 hours a day, 365 days a year, with no restrictions on the length or number of calls placed. This valuable communications tool gives all individuals who are deaf, hard of hearing or speech disabled the opportunity to make personal and business calls just like any other telephone user. Both TT/TTY and voice users may initiate calls through the Relay Service. The person who cannot speak or listen on the phone needs to have a TTY.

Relay calls made in the Florida Relay System are strictly confidential. All calls will be kept private, and no records of any conversation will be maintained.

**Who is Florida Telecommunications Relay Inc.?**

Florida Telecommunications Relay Inc. (FTRI) is a not-for-profit organization that provides specialized telecommunications equipment for Florida residents who are Deaf, Hard of Hearing, Deaf/Blind and Speech-Impaired *at no charge*. Specialized telephones and ring signaling devices can help friends or family members who have difficulty communicating over the telephone.

1. Fill out an FTRI application.
2. Have the application certified by a licensed professional (physician, audiologist, hearing-aid specialist, speech pathologist, etc).
3. Return application to FTRI, or visit one of our 35 regional locations statewide.

**How do you qualify for the Program?**

1. Be a Florida resident.
2. Be 3 years of age or older to receive equipment.
3. Be certified as having a hearing or speech-impairment.

**How much will this cost?*****ABSOLUTLY NOTHING!!***

- **No cost** for any of FTRI's equipment.
- No charge to use Florida Relay 711.
- Keep the equipment for as long as the individual needs it.

**How can we take advantage of this statewide program?**

Call FTRI 1-888-292-1950 ext. 232, or visit us online at [www.ftri.org](http://www.ftri.org)

# PARENTING



All children need three types of inner resources if they are to become adults with self-discipline:

1. Good feelings about themselves and others;
2. An understanding of right and wrong; and
3. Alternatives for solving problems.

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## **Twelve Strategies for Raising Children who will Be Self-Disciplined and Responsible Adults:**

### **1. Express Love**

Expressions of love can head off undesirable behavior. When a child feels loved, he or she wants to please his or her parents. A warm facial expression, a kind tone, a look of admiration and enthusiasm, a hug, all express love in an unmistakable way. Older children, who may be embarrassed by physical expressions, welcome the personal attention of a game or special time with mom or dad.

### **2. Be Predictable**

Children thrive in a predictable environment. Routines and schedules carried out consistently provide feelings of stability and security. This is also true with parenting behavior – consistent messages and consistent, reasonable consequences result in a child who trusts his or her parents. Consistency can be especially important for some children with hearing loss who have limited communication skills.

### **3. Communicate Clearly**

Make sure your words and actions are sending the same message. Young children need to have things spelled out for them. To teach an abstract concept like “sharing”, use examples.

If there is a communication challenge because of hearing loss, acknowledge the need to purposefully develop strategies to close the gap. With a child who has hearing loss, consider creating a routine way to make sure your message was understood as intended. Have him or her repeat back what was understood. Role-play to teach productive, appropriate questioning techniques that will be essential at home, at school, and throughout the child’s environment.

### **4. Understand Problem Behavior**

By being a good observer, you can gather information that will help you understand what your child’s problem behavior means. Look for a pattern. What happens before the behavior starts? When, where and with whom does it occur? Is there a physical cause such as hunger or fatigue? Was the communication experience unsuccessful, resulting in frustration, anger and lashing out? Does he or she feel threatened, hurried or ignored? Is your child seeking attention in an unappealing way? Is he or she having trouble expressing himself or herself and projecting his or her negative energy in a physical way? Which is needed...punishment or a shoulder to cry on?

### **5. Catch Your Child Being “Good”**

It’s easy to take for granted what we approve of, and hard to ignore what we don’t like. This makes it easy to neglect opportunities to praise good behavior and instead focus on bad behavior. Let your child feel and see your approval. Turn ‘no’ statements into ‘yes’ statements, i.e. “I love how careful you’re being with that antique vase.”

**6. Set Up a Safe Environment**

Children love to explore and thrive in environments where things can be pulled on, climbed over, taken apart and put back together again (maybe). This isn't being naughty, this is their nature. Make their environment safe. The more appropriate things there are available to explore, the fewer problems with inappropriate behavior a child will have. Consider how this applies to adolescents and even teenagers. A safe environment is one where the rules and limits are defined and understood.

**7. Set Sensible Limits**

Neither parents nor children want to live in a police-state atmosphere in which there are so many rules it's impossible to avoid breaking them. Generally, very young children can remember only a few rules and a great deal of adult supervision is required to enforce them. Make the language simple and direct, like: "Use words. No hitting."

The limits expand as the child grows older. Going outside established limits is an exercise in trust between parent and child. If your adolescent or teenager demonstrates responsible behavior, he or she should be rewarded with certain privileges. If he or she demonstrates a lack of responsibility, the limits may need to be more tightly drawn and defined until trust is built again.

**8. Defuse Explosion**

Step in while your child is still calm enough to discuss a problem. Intervene before anger gets out of control. If certain situations are recipes for disaster, talk about them ahead of time and create some plans for coping and resolving. For children with hearing loss, not being understood because of a communication difference or understanding gap is a common occurrence, and one that lends itself to frustration and anger. Anticipate these kinds of circumstances. Parents can often help children avoid a meltdown by pointing out problem-solving alternatives that can be employed before the problem rises to a crisis state.

**9. Teach Good Problem Solving Skills**

There are good solutions to problems, and not so good solutions to problems. How do you get your child to know the difference? Start by clearly labeling unacceptable behavior and explain why. Follow up with positive suggestions for what to do next time. For children under four, it's best to simply state what you want them to do next time. For older children who can express themselves and think abstractly, ask them what they could do next time that would be better. Suggest additional alternatives. As children get older and mature, they will be able to employ these tactics more successfully if they have had practice since childhood.

If a problem stems from communication gaps, which is often true for children with hearing loss, use the same strategies and exploit every opportunity to expand the child's language base around conflict resolution. Knowing how to express thoughts and feeling and state his or her position will increase your child's sense of empowerment to successfully solve problems.

**10. Don't Overreact**

Giving lots of attention to problem behavior can create another set of problems. Telling your child to go to a time out place or removing him or her from the play area where he or she misbehaved, delivers a consequence for bad behavior without drawing attention to the activity.

**11. Seek Professional Help When Needed**

Most children grow out of common behavioral problems with the patient guidance of parents and other caring adults. But for a small percentage, the problem behaviors persist and can become severe. Professional help is an excellent resource that can provide support and a constructive plan of action.

**12. Be Patient with Your Child and Yourself**

Misbehavior happens. It's human nature to learn from our mistakes. And a key to the healthy psychological development lies in the child's ability to do just that. If you follow all 12 steps faithfully and still experience a repeat of bad behaviors, remind yourself that your child is in a learning process called childhood. Your consistency, patience and love will provide him or her with the support needed to emerge into a mature adult.

*Excerpted and adapted by Leanne Seaver, Colorado Hands & Voices, from Thelma Harms Ph.D., University of North Carolina, Chapel Hill*

# ADVOCATE FOR YOUR CHILD



There is so much to do when you learn that your child has a hearing loss. Your child's hearing loss needs to be diagnosed as quickly as possible and he or she should be fit with amplification. You need to work with your insurance company to cover the new medical expenses. Advocating for your child's needs takes energy and dedication. It can be discouraging when things don't seem to be going well and thrilling when you finally achieve what you set out to do.

- ***The Law***
  - ***IDEA***
  - ***Part C***
  - ***Part B***
  - ***Section 504***
  - ***ADA***

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## **The Law**

### ***Parents are advocates for their children who are hard of hearing or deaf.***

As a parent, you have the right to expect professionals to treat your concerns seriously and respectfully. It is your right to decide what is best for your child and to participate in decisions regarding him or her. You have the right to accept or decline services offered to you by professionals or the school district. Advocating for your child may involve writing letters, making phone calls, enlisting professional support, and attending meetings. Parents are the best advocates in working collaboratively with partners to plan for their children's needs.

There have been many forms of legislation passed that specify services and rights for individuals who are hard of hearing or deaf. As a parent, you must know your rights.

### **Individuals with Disabilities Education Act (IDEA)**

This law requires that all children be given a free appropriate public education with meaningful access to the general curriculum and high expectations and standards.

### **Part C of the Individuals with Disabilities Education Act**

Part C regulates services for infants and toddlers from birth to 36 months. Important aspects of this section of the law refer to services and supports occurring in natural environments. For children with disability conditions, the natural environment is often defined as the community in which the child and family participate. For children with hearing loss, the natural environment can be defined as a language rich environment in which the child can effectively communicate.

There are occasions when children must receive services outside of the community or home setting and are delivered as part of the early intervention program. Necessary clinical services should be one component of a comprehensive program that includes opportunities for the child to participate in intervention in the natural environment (e.g. home, grandma's house, child care) and in the community.

Another essential component of Part C of the IDEA is the focus on families and their right to make decisions regarding what is best for their child. Families are guided through this decision making process by Family Support Teams. Parents are encouraged to choose the program that they feel is the best match for their family.

### **Part B of the Individuals with Disabilities Education Act**

Part B regulates individualized special education services for children ages 3 through 21. When a child is potentially eligible for the school district Prekindergarten Program for Children with Disabilities, the Florida Early Steps program will make a formal referral to the local school district with parental consent, before, during or after the transition conference. This will initiate the process of determining if your child will be eligible to receive services as a special education student when he or she turns three years old. Eligibility for special education services is based on two issues. First, if it is determined that your child's hearing loss significantly affects his or her ability to learn and second that he or she will require some specially designed instruction. He or she will be eligible

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for services from the local school district upon his or her third birthday. The Florida Early Steps program will work with you and the school district to plan for the transition to school services. Transition plan identifies what activities need to occur to identify or develop an appropriate program for your child. Ultimately, the child's school program, services and supports will be described in a document called an individualized educational plan or IEP. Some items that may be considered in the development of the IEP are:

- Need for equipment (e.g., FM system so child can access teacher instruction at a distance greater than 3 feet or in the presence of typical levels of classroom noise)
- The classroom acoustics (open plan schools, classrooms with noisy ventilation systems, or adjacent to noisy activities. These typically prevent access of the child who is hard-of-hearing to verbal instruction, even when using an FM system)
- The philosophy of the program (i.e., auditory-oral, total communication)
- Staffing
- Training needs for staff and therapists
- Levels of support needed
- Interaction with peers including children who have and do not have hearing loss

### **Section 504 of the Rehabilitation Act of 1973**

This ensures that eligible children with disabilities receive special accommodations or services in the classroom to provide equal access to classroom instruction. Even if your child is not eligible under Part B, schools may still need to provide accommodations under Section 504 of the Rehabilitation Act of 1973.

### **Americans with Disabilities Act of 1990 (ADA)**

This ensures that all people with disabilities have access to public events, spaces and opportunities. Families often find the ADA law supportive in determining accommodations for involvement in community resources such as childcare or recreational activities.

<p>If you have private insurance, you should check about the coverage for your child's needs including audiology testing, hearing aids, follow-up services, and speech/language/auditory therapy. It may be necessary for you to educate insurance companies and/or your employer in order to obtain coverage for your child's needs.</p>
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# CONCLUSION



For families with infants and young children, this is a time when much information is being shared with you on how your deaf or hard of hearing child can develop fluency in language. It is important to research and gain as much information as possible from a variety of professionals including those who specialize in language development for children who are deaf or hard of hearing. It is equally important to consult with educators in deaf education as well as deaf mentors who can help give you an inside perspective of what your child may experience and the support that is available for your family and your child. Once you have done your homework, it will be easier for you to prepare to use the variety of language opportunities that are available for your child. Early Steps – Florida’s Early Intervention Program is committed to working with families to develop supports and services that meet the unique needs of each child and family. This process is designed to include a reflection of the child and family’s current concerns, priorities, and resources, as well as assisting families to plan for the future.

Once your child is identified with hearing loss it is important to have his or her vision screened. Sometimes vision loss accompanies hearing loss. Some causes, or syndromes,

of hearing loss also have vision loss as a component. It is recommended that your hearing impaired child have an ophthalmologic examination regularly. Vision is important for all children with hearing loss since many use their eyes to help understand their world.

For families with children who have a hearing loss, the first months after the hearing loss is diagnosed is a time when a significant amount of information is shared and interpreted. There are many methods of intervention for a young child with hearing loss. Individuals who believe one method is better than another may be passionate about this belief. However, it is important for families who have a young child to obtain the perspective of many professionals and individuals in the hard of hearing or deaf community. This will assist them with making decisions about what works best for them and their children. As your child develops you may want to change your decisions over time. Use your Florida Early Steps program experience to engage in a process of gathering information, and questioning and challenging this information. Our goal is to help families meet the unique needs of their child who has hearing loss and lay the foundation for their children to develop to their optimum ability.

# DEFINITIONS



There is a lot to learn about hearing loss and this section should help you get up to speed with the language and terminology. The world of hearing loss is filled with unfamiliar phrases and words.

**ABR / AUDITORY BRAINSTEM RESPONSE / ASSR / AUDITORY STEADY STATE RESPONSE** – *An objective, non-invasive test that measures responses to auditory stimuli by the synchronous discharge of neurons in the auditory nerve and brainstem. This test can indicate whether or not sound is being detected in the brain, even in an infant.*

**ACOUSTIC FEEDBACK** – *The whistle caused when amplified sound recycles through the microphone of an amplifying system, such as a public address system or a hearing aid.*

**ACOUSTICS** – *Pertaining to sound, the sense of hearing or the science of sound. Often used to refer to the quality of the listening environment.*

**ACQUIRED HEARING LOSS** – *Hearing loss, which is not present at birth.*

**ADVOCACY** – *The role parents or guardians play in developing and monitoring their child’s educational program. Knowing what rights are assured you by the law and actively participating in the decision-making process to ensure that the services are delivered according to your goals for your child’s development and education.*

**AMBIENT NOISE** – *Background noise, which competes with the main speech signal.*

**AMERICAN SIGN LANGUAGE (ASL)** – *A language that is communicated by sign, expressions, and gestures, rather than by spoken speech. ASL is a language of its own, not related to written or spoken English. It has a unique grammar and syntax.*

**AMPLIFICATION** – *The use of hearing aids and other electronic devices to increase the loudness of sound so that it may be more easily perceived and understood.*

**ASSISTIVE LISTENING DEVICE (ALD)** – *Any type of electronic aid to hearing including personal hearing aids, FM systems, special inputs for telephones or televisions, and amplified alarms and signals that are available to help deaf and hard of hearing people improve communication, adapt to their environment, and function in society more effectively.*

**ATONAL** – *Refers to voice quality that lacks traditional inflection, modulation, musical tonality or harmonics.*

**AUDIOGRAM** – *A graph on which a person’s ability to detect different pitches (frequencies) at different volumes (intensities) of sound is recorded.*

**AUDIOLOGICAL ASSESSMENT / AUDIOLOGIC EVALUATION** – *A hearing test conducted by an audiologist to discover how well your child hears at different frequencies (pitches), along with recommendations for whether or not additional actions are indicated.*

**AUDIOLOGIST** – *A professional who holds a graduate degree and professional certification in the assessment and management of hearing loss and balance disorders. Audiologists fit and dispense hearing aids and other listening devices.*

**AUDITORY-ORAL** – *An approach that teaches children to listen and speak by maximizing residual hearing and using audition as the main channel of acquiring speech and language. The goal is for these children, through early and intensive intervention, to develop natural language and age appropriate academic skills, and to grow up to become independent, contributing members of society.*

**AUDITORY TRAINING** – *The process of training a person’s residual hearing in the awareness, identification, and interpretation of sound. This usually involves both the help of technology (a hearing aid or cochlear implant) and training to recognize and interpret sound correctly.*

**AUDITORY-VERBAL** – *The auditory-verbal philosophy supports the right of children with all degrees of hearing loss to develop the ability to listen and communicate using spoken language. Individualized therapy uses parents as primary facilitators for language development. The goal is that children with a hearing loss grow up in regular learning and living environments and that they become independent, contributing citizens. The Auditory-Verbal Therapist is a*

*qualified educator of children with hearing loss, an audiologist and/or a speech language pathologist who supports the principles of the Auditory-Verbal approach.*

**AURAL (RE) HABILITATION** – *Training designed to help persons who have lost their hearing or children who have a prelingual hearing loss to learn to use residual hearing. The training may include auditory skill development, speechreading, language development and counseling for psychosocial adjustment for individuals and families.*

**BEHAVIORAL OBSERVATION AUDIOMETRY** – *The assessment of a young child's response to sound by observing specific behaviors that occur when sounds are presented in a sound suite.*

**BILINGUAL / BICULTURAL** – *Being fluent in two languages and membership in two cultures such as hearing (spoken language) and the Deaf culture (American Sign Language).*

**BILATERAL HEARING LOSS** – *A mild to profound hearing loss in both ears.*

**BODY AID** – *An amplification unit that is worn on the body with cords leading to earmolds. It provides increased gain (power) and less feedback for people with a severe to profound hearing loss. Primarily used only in special situations where ear-level hearing aids cannot be used.*

**BONE CONDUCTION** – *Sound received through the bones of the skull. Bone conduction hearing testing bypasses the outer and middle ear and directly stimulates the cochlea by passing sound vibrations through the skull bone.*

**CHRONOLOGICAL AGE / ADJUSTED AGE** – *Chronological age is how old the infant or child is based on his/her date of birth. It is referred to when comparing him or her to other children born at that same time. If a baby is born prematurely his/her development may be measured at his/her adjusted age. Adjusted age takes into account the time between premature birth and the actual due date of a full term pregnancy. Doing this gives a truer reflection of what the baby's developmental progress should be. This age adjustment is not generally necessary when the toddler reaches the age of two. Adjusted hearing age refers to how long a child has been amplified and relates to expectations on auditory and speech skill development.*

**COCHLEAR IMPLANT** - *An electronic device surgically implanted to stimulate nerve endings in the inner ear (cochlea) in order to receive and process sound and speech for persons with severe to profound hearing loss. Children can be implanted as young as one year of age.*

**COGNITIVE** – *Refers to the ability to think, learn and remember.*

**CONDITIONED PLAY AUDIOMETRY – (CPA)** – *In play audiometry the audiologist helps the child understand the rules for playing a game based on a conditioned response to sound. For example, when the child is presented with a sound he or she is to drop a block into a container, indicating that the sound was heard. Play audiometry is generally used when the child is at least 18 months old.*

**CONDUCTIVE HEARING LOSS** – *Impairment of hearing due to failure of sound waves to reach the inner ear through the normal air conduction channels of the outer and middle ear. In children, conductive loss is typically medically correctable, and is most often associated with otitis media.*

**CONGENITAL HEARING LOSS** – *Hearing loss present at birth or associated with the birth process, or which develops in the first few days of life.*

**CONTENT** – *Refers to vocabulary. Children may understand everyday words such as cup and shoe, but not understand a larger, more sophisticated number of words such as glass, tumbler, sippy cup, boot, slipper or cleats.*

**CUED SPEECH** – *An oral system that uses hand shapes to clarify lipreading in spoken language. Cued speech gives the person with hearing loss additional clues about the sound the speaker is making, but is not a language in itself (such as ASL).*

**DEAF** – *A hearing loss, which is so severe that a child is unable to process information through hearing alone.*

**DEAF COMMUNITY** – *A group of people who share common interests and a common heritage. Their mode of communication is American Sign Language (ASL). The Deaf community is comprised of people who are both deaf and hearing.*

**DEAF CULTURE** - *A view of life manifested by the mores, beliefs, artistic expression, understandings and language (ASL) particular to Deaf people. A capital “D” is often used in the word Deaf when it refers to community or cultural aspects of deafness.*

**DECIBEL: (dB)** – *A measure of sound intensity. The higher the decibel level, the louder a sound will be perceived. The normal range of hearing is from 0 dB (the faintest sounds) to 120 dB (the threshold of discomfort). Hearing loss is present when detection of sound does not occur until sounds are louder than 16 dB*

**DECODER** – *An electronic device or computer chip that can display closed captions encoded in television programs or videocassettes. Also called a telecaption adapter.*

**DETECTION** – *The ability to sense the presence or absence of sound. It is the most basic hearing skill. The ability to discriminate, identify, recognize, and comprehend sound, all assumes basic detection of sounds.*

**EARMOLD** – *A custom made plastic or vinyl ear insert that channels sound reproduced by the hearing aid or FM system through the ear canal.*

**EDUCATIONAL INTERPRETER** – *A person who is able to perform conventional interpreting, together with special skills for working in the educational environment.*

**ELIGIBILITY** – *A child must be determined eligible for special education services, based on specific hearing loss criteria and an exhibited delay in one or more of the following areas: cognitive ability, motor skills, social/adaptive behavior, perceptual skills, and communication skills.*

**ENT** – *A medical doctor, who specializes in the ears, nose and throat. Sometimes referred to as an Otolaryngologist or an Otologist.*

**EXPRESSIVE LANGUAGE** – *How a person is able to share ideas or feelings in any method or mode of communication.*

**INDIVIDUALIZED FAMILY SUPPORT PLAN (IFSP)** – *The IFSP addresses: 1) the family's strengths, needs, concerns and priorities; 2) identifies support services available to meet those needs; and 3) empowers the family to meet the developmental needs of their infant or toddler with a disability. The IFSP is a written plan developed by parents or guardians with input from a multi-disciplinary team. Refer to Part C.*

**FAMILY RESOURCE SPECIALIST (FRS)** – *Individuals employed by the local Early Intervention (EI) program who assist families of children in the early intervention system with information and support, as well as serving as a community link to support family centered efforts and activities within local EI programs.*

**FINGERSPELLING** – *Fingerspelling is a standardized series of handshapes to spell out words. Each letter has its own particular shape. Usually it is used when there is no sign for a particular word.*

**FM SYSTEM** – *An assistive listening device in which a microphone transmitter is worn by the speaker to transmit his/her voice directly to the listener's ears. An amplifier receiver can be coupled directly to hearing aids, headphones, and neckloop or ear level receivers. The transmitted signal can also be received by soundfield system speakers. The device reduces background noise interference and the problem of distance between the speaker and the listener with hearing loss.*

**FORM** – *How words are put together to make sentences.*

**FREQUENCY** – *The number of vibrations per second of a sound. Frequency, expressed in Hertz (Hz), determines the pitch of the sound.*

**GAIN** – *The range that describes how well the amplification is performing. For example, a child with unaided hearing at 70 dB hearing loss who, when amplified, hears at 30 dB hearing loss, is experiencing a gain of 40 dB.*

**GENETIC COUNSELING** – *Following genetic testing, counseling for individuals with birth defect/genetic disorders occurs. Approximately 50% of congenital hearing loss is due to genetic factors.*

**HARD OF HEARING / HEARING IMPAIRED** - *Hearing loss severe enough to interfere with school or work. Hard of hearing people can typically process speech and language quite well with the help of an auditory device, such as a hearing aid.*

**HEARING AID** – *An electronic device that conducts sound to provide amplification of a person's residual hearing.*

**HEARING AID SPECIALISTS** – *A person who sells and services hearing aids. While licensed to provide these services, only Clinical Audiologists are specially trained to evaluate and fit hearing aids on infants and toddlers.*

**\*HEARING LOSS** – *Hearing loss levels for children are typically characterized as follows:*

*Normal Hearing*                      0 dB to 20 dB

*Mild*                                      26 dB to 40 dB

*Moderate*                              41 dB to 55 dB

*Moderately Severe*                56 dB to 70 dB

*Severe*                                    71dB to 90 dB

*Profound*                                91 dB or more

*\*Audiology Information Series © American Speech-Language-Hearing Association, 2011*

**HEARING SCREENING** – *Screening provides a yes/no answer to the question, “Does this individual have detectable hearing loss of at least a certain degree at selected pitches (frequencies)?” Persons who fail a screening require further hearing testing to determine if a hearing problem exists.*

**HEARING SPECIALIST** – *A professional with specialized training related to serving children who have a hearing loss and their families.*

**HERTZ (Hz)** – *The measurement of frequency, or cycles per second (CPS), of sound waves.*

**HUGGIES** – *The brand name of a plastic-ringed device designed to “hug” the hearing aid to the ear. Popular for infants and toddlers whose ears may be too small to hold the hearing aid snugly in place.*

**IDEA** – *The Individuals with Disabilities Education Act, Public Law (PL) 108-446, formerly known as PL 105-17, PL101-476, PL 94-142 and PL 99-457, provides for specialized instruction for individuals with disabilities that meet eligibility requirements, typically evidence that the disability is causing adverse educational effects. Part C (See “Part C”) provides services to children birth to three years of age with disabilities.*

**INCLUSION** – *Refers to the concept that students with disabilities should be integrated and included to the maximum extent possible with their (typically developing) peers in the educational setting. Often used synonymously with the term “mainstreaming”.*

**INDIVIDUAL EDUCATIONAL PLAN (IEP)** – *A team-developed, written plan, which identifies goals and objectives that address the educational needs of a student aged 3-21 with a disability. An IEP for a child with hearing loss must take into account such factors as 1) the student’s language and communication needs 2) opportunities for direct communications with peers and professional personnel in the student’s language and communication mode; 3) academic level, 4) social, emotional needs; and 5) appropriate accommodations required to provide full access in the learning environment.*

**INTENSITY** – *The loudness of a sound, measured in decibels (dB).*

**INTERPRETER** – *A person who facilitates communication between hearing people and people with a hearing loss through interpretation into an American Sign Language, Manually Coded English or transliteration into a visual and/or phonemic code by an oral interpreter, a signed language interpreter or cued speech transliterator.*

**INTONATION** – *The aspect of speech made up of changes in stress and pitch in the voice.*

**LEAST RESTRICTIVE ENVIRONMENT** – *A basic principle of Public Law 108-446 (IDEA) which requires public agencies to establish procedures to ensure that to the maximum extent appropriate, children with disabilities, including children in public or private institutions or other care facilities, are educated with children who are not disabled, and that special classes, separate schooling, or other removal of children with disabilities from the regular educational environment occurs only when the nature or severity of the disability is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily. For children with hearing loss, least restrictive environment should reflect a language rich environment in which a child can have the greatest access to instruction and peer communication.*

**MAINSTREAMING** – *Integrating students with hearing loss in classrooms with normally hearing students as much as possible. The term is used synonymously with “inclusion”.*

**MONAURAL AMPLIFICATION** – *The use of one hearing aid instead of two.*

**MORPHEME** – *A linguistic unit of relatively stable meaning that cannot be divided into smaller meaningful parts.*

**MULTI-DISCIPLINARY ASSESSMENT AND EVALUATION** – *Qualified persons representing two or more disciplines or professions, i.e. a speech therapist and an audiologist make the assessment and evaluation of the child. The child’s development is evaluated to determine if there are any delays or conditions that would indicate the need for special services.*

**NATIVE LANGUAGE** – *The language used in the home environment.*

**ORAL** – *A non-specific term that can be used when referring to individuals with hearing loss and deafness who have speech skills (may or may not use a sign system). Emphasis is placed on use of residual hearing, lip reading and contextual cues to communicate using spoken language.*

**ORAL DEAF EDUCATION** – *An approach based on the principle that children who are deaf and hard-of-hearing can be taught to listen and speak with maximizing residual hearing and using audition as the main channel of acquiring speech and language. Also known as Auditory-Oral Education.*

**OTITIS MEDIA** – *Fluid or infection developing behind the eardrum in the middle ear cavity. Children with recurring episodes may experience fluctuating hearing loss and may be at risk for speech and language delays. Fluid can be present with or without infection, and may cause temporary hearing loss, which can evolve into permanent loss.*

**OTOACOUSTIC EMISSIONS (OAE) TEST** – *An objective audiological test that verifies outer hair cell cochlear activity. Often is used in testing infants suspected of hearing loss. A probe is placed in the ear canal for this measurement. Middle ear effusion or children’s movements can affect the accuracy of OAE tests.*

**OTOLARYNGOLOGIST** – *A physician who has advanced training in disorders of the ear, nose, throat, head, and neck.*

**OTOLOGIST** – *A physician who specializes in diagnosis and treatment of hearing loss and other disorders of the ear.*

**OUTPUT** – *Refers to how much amplification is being put out by a hearing aid.*

**PARENT-INFANT PROGRAM** – *A program of family-centered education and infant intervention that stresses early exposure to language and attention to developmental processes which enhance learning language.*

**PART B** – *Part B is the section of Public Law PL 108-446 (IDEA) that refers to special education and related services and accommodations available to eligible children aged three through twenty-one in the public schools. These are provided by school districts, also known as local Educational Agencies, across the state.*

**PART C** – *Part C is the section of Public Law PL 108-446 (I.D.E.A) that refers to early intervention services available to eligible children from birth through three years of age and their families. In Florida, the Department of Health, Children’s Medical Services, Early Steps program administers Part C Services.*

**PITCH** – *The brain’s interpretation of the physical frequency of sound waves.*

**POST-LINGUAL DEAFNESS** – *Refers to hearing loss acquired after learning a first language.*

**PRAGMATICS** – *Refers to how we use the rules of speech in social situations. For example, children may not know how to start a conversation or may misunderstand that when someone asks a question, they expect an answer.*

**PRE-LINGUAL DEAFNESS** – *Refers to hearing loss, which is congenital or acquired before acquisition of language.*

**PURE-TONE** – *A tone or note that has only one frequency, with no harmonics or overtones. Pure tone detection thresholds are obtained during a hearing evaluation.*

**PURE-TONE AVERAGE** – *The average of detection levels measured at 500, 1000, and 2000 Hz.*

**REAL-EAR MEASUREMENT** – *An audiological test that measures the actual output of the hearing aid in the ear canal. This test uses a “probe-microphone” that is placed into the ear canal along with the hearing aid and ear mold fitted in place. It assesses how effectively sound is actually being amplified by the hearing aids in the ear. It is considered a very important measurement because size and shape of the ear canals will affect how much amplified sound a hearing aid provides. Real-ear measurements should be performed every time earmolds are replaced on a growing child.*

**RECEPTIVE LANGUAGE** – *Words or signs that a person understands.*

**RELAY TELEPHONE SERVICES** – *Relay Telephone Service/Relay Network is a service which involves an operator “relaying” conversation between a TDD/TTY user (generally a*

*person with a hearing loss and/or speech impairment) and a hearing /speaking individual using an ordinary, non-adapted phone.*

**RESIDUAL HEARING** – *The amount of usable hearing that a person with hearing loss has. The point at which a person is considered to have no useable hearing is considered to be 100 dB ( $\pm$  10 dB). Therefore, a child with a 70 dB loss at all tested pitches would have approximately 30 dB of usable hearing. With appropriate amplification on, a person with 80-90 dB hearing loss can detect most or all of the speech sounds presented within 3 feet in a quiet environment.*

**SEMANTICS** – *The meaning-related aspects of language.*

**SENSORINEURAL** – *A type of hearing impairment caused by deformity or damage that occurs to the hair cells or other structures of the inner ear (cochlea) and/or nerve of hearing. Currently sensorineural damage to the hair cells of the cochlea is usually irreversible.*

**SOUND FIELD** – *Hearing test term for an area or room in which sound waves are transmitted through a loudspeaker, in contrast to sounds that are delivered directly to the ear through earphones.*

**SPEECH AWARENESS THRESHOLD (SAT)** – *This is the faintest level at which an individual detects speech 50% of the time. This is indicated in an audiological test, with or without hearing aids.*

**SPEECH INTELLIGIBILITY** – *The ability to be understood when speaking. Speech intelligibility is dependent on a person's ability to produce the speech sounds of a language in typical conversation.*

**SPEECH / LANGUAGE PATHOLOGIST (SLP)**– *A professional who works with individuals who have specific needs in the areas of speech and language. An SLP has a graduate degree and professional certification. Most SLPs have limited training in working with persons with hearing loss but few have specialized training or experience.*

**SPEECHREADING** – *The interpretation of lip and mouth movements, facial expressions, gestures, prosodic and melodic aspects of speech, structural characteristics of language, and topical and contextual clues. Only 30-40% of speech sounds are visible on the lips and highly skilled speechreaders rely heavily on context and knowledge of language.*

**SPEECH RECEPTION THRESHOLDS (SRT)** – *This is the faintest level at which an individual identifies and repeats 50% of the simple spoken words presented by the audiologist (baseball, hot dog, high chair, airplane).*

**SPEECH SPECTRUM** – *The range of frequencies in which speech sounds are carried.*

**SPEECH ZONE (SPEECH BANANA)** – *On an audiological graph measured in decibels and frequencies, the area where most conversational sounds of spoken language can be detected in quiet at a distance of 2 meters. Sometimes called the "speech banana" because of the shape this area depicts on the graph. It is important that hearing aids amplify sound into this zone.*

**SYNTAX** – *Defines the word classes of language, i.e. noun, verbs, etc, and the rules for their combination, i.e. which words can combine and in what order to form sentences.*

**TACTILE AIDS** – *Assistive communication device that emits a vibration or “tactile” signal to indicate the presence of sound(s). It is worn on the body and triggers the sense of touch or feeling to draw attention to information that cannot be heard by the individual with hearing loss. The sense of touch cannot discriminate fine differences as effectively as hearing or vision senses.*

**TELECOMMUNICATIONS DEVICES FOR THE DEAF (TDD’S)** – *Originally and often still called TTY’s, these electronic devices allow the deaf and hard of hearing to communicate via a text telephone system.*

**THRESHOLD INFORMATION** – *This is the smallest intensity or loudness of sound the child can detect.*

**TOTAL COMMUNICATION** – *An educational philosophy that uses manual supports for spoken English. Sign, gestures, fingerspelling, facial expressions, and body language are used as needed for full and expressive communication.*

**TRANSLITERATOR** – *A person who facilitates communication between hearing people and people with a hearing loss through transliteration into a visual and/or phonemic code by a cued speech transliterator.*

**TYMPANOGRAM** – *It can show how the ear canal, eardrum, Eustachian tube, and middle ear bones are working together. It is not a hearing test. Tympanometry is useful in detecting the pressure of fluid or infection behind the eardrum.*

**UNILATERAL HEARING LOSS** – *A mild to profound hearing loss in one ear.*

**VISUAL REINFORCEMENT AUDIOMETRY (VRA)** – *Audiological assessment in which the child is conditioned to look at a toy that lights each time he or she hears a sound. Used with children at least 5-6 months developmental age and any child not able to be conditioned for play audiometry.*

# RESOURCES



- *Local Resources*
- *State Resources*
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- *Websites*
- *Organization Phone Numbers*
- *Books*
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- *Florida Funding Sources*
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## Local Resources

### Early Steps Contact List

[cms-kids.com/home/contact/earlysteps.pdf](http://cms-kids.com/home/contact/earlysteps.pdf)

### CARD – Center for Autism and Related Disabilities-Gainesville

University of Florida at Gainesville

Department of Psychiatry

PO Box 100234

Gainesville, FL 32610-0234

352-846-2761 or 800-754-5891

[www.card.ufl.edu](http://www.card.ufl.edu)

### CARD – Center for Autism and Related Disabilities-Jacksonville

University of Florida at Jacksonville

6026 San Jose Blvd.

Jacksonville, FL 32217

904-737-5239

[www.hscj.ufl.edu/pediatrics/autism/](http://www.hscj.ufl.edu/pediatrics/autism/)

### CARD – Center for Autism and Related Disabilities-Miami

University of Miami

Dept. of Psychology

5665 Ponce de Leon Blvd.

Coral Gables, FL 33124-0725

305-284-6563 or 800-9-AUTISM

[www.psy.miami.edu/card](http://www.psy.miami.edu/card)

### CARD – Center for Autism and Related Disabilities-Orlando

University of Central Florida

12001 Science Drive, Suite 145

Orlando, FL 32826

407-737-2566 or 888-558-1908

[www.ucf-card.org/](http://www.ucf-card.org/)

### CARD – Center for Autism and Related Disabilities-Tallahassee

Florida State University

625-B North Adams St.

Tallahassee, FL 32301

850-644-4367 or 800-769-7926

[//autism.fsu.edu](http://autism.fsu.edu)

### CARD – Center for Autism and Related Disabilities-Tampa

University of South Florida

CARD-USF MHC2113A

13301 Bruce B. Downs Blvd.

Tampa, FL 33612-3899

813-974-2532 or 800-333-4530

<http://card-usf.fmhi.usf.edu/>

## State Resources

### AG Bell Florida

<http://www.listeningandspokenlanguage.org/FloridaAGBell/> Florida chapter of the Alexander Graham Bell Association for the Deaf and Hard of Hearing, which advocates for independence through listening and talking.

### Clearinghouse Information Center

Florida Department of Education  
850-245-0477

[www.fldoe.org/ese/clerhome.asp](http://www.fldoe.org/ese/clerhome.asp)

Materials about children ages birth through 4 focusing on child development, early intervention, education, disabilities, developmental delays, health and related topics.

### Children's Medical Services

[www.cms-kids.org](http://www.cms-kids.org)

Provides children with special health care needs a family centered, managed system of care.

### CMS-Early Steps State Office

(800) 654-4440

[http://cms-](http://cms-kids.com/families/early%5Fsteps/early_steps.html)

[kids.com/families/early%5Fsteps/early\\_steps.html](http://cms-kids.com/families/early%5Fsteps/early_steps.html)

Policy and public reporting information on Florida's early intervention system, Early Steps.

### Family Voices of Florida at Florida Institute for Family Involvement (FIFI)

(877) 926-3514

[http://www.fifionline.org/family\\_voices\\_fl.html](http://www.fifionline.org/family_voices_fl.html)

Provides support to families and professionals through individualized assistance, training, conferences, parent matching, support groups, resource guides, listservs, newsletters, and surveys.

### Florida Association of the Deaf (FAD)

[www.fadcentral.org](http://www.fadcentral.org)

PO box 21221

Bradenton, FL 34204

An organization affiliated with the National Association of the Deaf (NAD) that promotes Deaf, Hard of Hearing, and Late Deafened Floridians to interact with each other as well as with the hearing community, legislature and agencies/organizations serving Deaf, Hard of Hearing, and Late Deafened citizens.

### Florida Hands & Voices

(866) 422-0422

<http://www.flhv.org/>

Florida's chapter of the nationwide Hands & Voices, a non-profit organization dedicated to supporting families and their children who are deaf or hard of hearing, as well as the professionals who serve them.

### Florida Kidcare

[www.floridakidcare.org](http://www.floridakidcare.org)

Health insurance for Florida children from birth through age 18.

### Florida Newborn Hearing Screening Program

(866) 289-2037 [www.floridanewbornscreening.com](http://www.floridanewbornscreening.com)

Florida's newborn hearing screening page with statewide data and required forms/procedures.

### Florida and Virgin Islands Deaf-Blind Consortium

University of Florida

PO Box 100234

Gainesville, FL 32610

(352) 846-2757 V (352)846-2759 TTY

[www.deafblind.ufl.edu](http://www.deafblind.ufl.edu)

Assists families aged birth through 21 who have both hearing loss and vision disabilities by promoting the full inclusion and participation of persons with deaf-blindness as active members of their communities.

### Florida School for the Deaf & the Blind

(800) 344-3732

[www.fsdb.k12.fl.us](http://www.fsdb.k12.fl.us)

Florida's public boarding school for eligible students who are deaf or hard-of-hearing, or blind or visually impaired students in preschool through grade 12.

### Florida Speech-Language-Hearing Association

[www.flasha.org](http://www.flasha.org)

Serves the needs of Florida professionals by providing support, opportunities for professional growth, and public awareness and advocacy of issues related to the highest quality care for the individuals they serve.

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Florida's Alliance for Assistive Services and Technology

(850) 487-3278 or (888) 788-9216

[www.faast.org](http://www.faast.org)

*Provides hands on assistive technology demonstrations and training, financing for assistive technology purchases, assistive device lending programs, community outreach to rural and underserved groups, and advocacy and education on consumer choice.*

Florida's Resource Materials and Technology for the Deaf/Hard of Hearing

<http://rmtcosbd.org>

*A specialized FDLRS center serving teachers of the deaf and hard of hearing throughout the state of Florida.*

Assistance with Achieving Results in Education (AWARE) Project

1021 Delaware Ave.

Palm Harbor, FL 34683-3529

(888) 612-9273

<http://centralfloridaparentcenter.org/aware-project-pti/>

*Florida's Technical Assistance ALLIANCE for Parent center, federally funded parent centers that provide a variety of services including one-on-one support and assistance, workshops, publications, and web sites. Serves 30 counties in central and northeast Florida.*

## National Resources

### A Parent's Guide to Hearing Loss

<http://www.cdc.gov/ncbddd/hearingloss/parentsguide/>

*An informational module that walks through the choices available for families of children with a hearing loss.*

### Advanced Bionics Corporation

12740 San Fernando Road  
Sylmar, CA 91342  
1-800-678-2575 1-800-678-3575 TDD

[www.cochlearimplant.com](http://www.cochlearimplant.com)

*For parents who are considering a cochlear implant for their child and would like more information.*

### Alexander Graham Bell Association for the Deaf and Hard of Hearing

3417 Volta Place, NW  
Washington, DC 20007-2778  
(202) 337-5220 (202) 337-8314 TTY

[www.agbell.org](http://www.agbell.org)

*An international organization comprised of parents, professionals, and oral hard of hearing children and adults that provide newsletters, journals, and information relating to oral education.*

### American Academy of Audiology

11730 America Dr.  
Reston, VA 20190  
1-800-222-2336 V/TTY

[www.audiology.org](http://www.audiology.org)

*Professional organization for audiologists that provides information on audiology and related issues.*

### American Speech-Language-Hearing Association

10801 Rockville Pike  
Rockville, MD 20853-3279  
(301) 897-5700 or 1-800-638-8255

[www.asha.org](http://www.asha.org)

*Professional organization for speech language pathologists & audiologists that provides information on communication disorders.*

### American Society for Deaf Children

<http://deafchildren.org>  
800 Florida Avenue, NE #2047  
Washington, DC 20002-3695  
Toll Free Helpline: (800) 942-2732  
Videophone: (202) 644-9204

[www.deafchildren.org](http://www.deafchildren.org)

*Prints the Endeavor magazine & provides parent support, especially regarding the use of American Sign Language.*

### ASL Browser

<http://commtechlab.msu.edu/sites/aslweb/browser.htm>

*Shows a video demonstrating how to sign words.*

### ASL University

[www.lifeprint.com/asl101](http://www.lifeprint.com/asl101)

*Online curriculum resource center that provides free self-study materials and lessons as well as fee-based instructor-guided courses in American Sign Language.*

### Auditory-Verbal International Inc. (AVI)

1390 Chain Bridge Rd., #100  
McLean, VA 22101  
(703) 739-1049 V (703) 739-0874 TTY

[www.auditory-verbal.org](http://www.auditory-verbal.org)

*An international organization providing resources and information to parents & professionals on teaching HI children to speak with residual hearing & amplification.*

### Beginnings

North Carolina Council for the Hearing Impaired  
620 North West Street  
P.O. Box 17646  
Raleigh, NC 27619  
(919) 850-2746

[www.ncbegin.org](http://www.ncbegin.org)

*A non-profit agency providing an impartial approach to meeting the diverse needs of families with children who are deaf or hard of hearing.*

Better Hearing Institute

515 King St., Suite 420  
Alexandria, VA 22314  
(703) 684-3391

<http://www.betterhearing.org>

*Hearing loss and hearing aids information.*

Butte Publications

[www.buttepublications.com](http://www.buttepublications.com)

*Publications covering language skill building (English or sign), professional resources, and other informative publications.*

Center for Disease Control

[www.cdc.gov/ncbddd/ehdi](http://www.cdc.gov/ncbddd/ehdi)

*Early Hearing Detection and Intervention program information.*

Center on Technology and Disability

<http://www.ctdinstitute.org/>

*Designed to increase the capacity of families and providers to advocate for, acquire, and implement effective assistive and instructional technology practices, devices, and services.*

Cochlear Corporation

400 Inverness Pkwy., Suite 200  
Englewood, CO 80112  
1-800-523-5798 V/TDD

[www.cochlear.com](http://www.cochlear.com)

*For parents who are considering a cochlear implant for their child and would like more information.*

Connecticut Birth to Three System

[www.birth23.org](http://www.birth23.org)

*Information on hearing loss and related topics*

Educational Audiology Association

<http://edaud.org/>

12011 Tejon Street, Suite 700  
Westminster, CO 80234  
800-460-7EAA (7322)

*An international organization of Audiologists and related professionals who deliver a full spectrum of hearing services to all children, particularly those in educational settings.*

Hands & Voices, International

[www.handsandvoices.org](http://www.handsandvoices.org)

*Unbiased communication support for families.*

Laurent Clerc National Deaf Education

Center at Gallaudet University

(202) 651-5051

<http://clerccenter.gallaudet.edu/infotogo>

*Centralized source of information on topics dealing with deafness and hearing loss. Disseminates information on deafness, hearing loss, services and programs related to people with hearing loss available throughout the United States.*

International Hearing Dog, Inc.

5901 East 89<sup>th</sup> Ave.

Henderson, CO 80640

(303) 287-3277 V/TDD

<http://www.ihdi.org/home.aspx>

*Train dogs to assist persons who are deaf or hard-of-hearing, with and without multiple disabilities, at no cost to the recipient.*

John Tracy Clinic

806 W. Adams Blvd.

Los Angeles, CA 90007

1-800-522-4582 or (213) 748-5481

[www.jtc.org](http://www.jtc.org)

*Provides worldwide and without charge, parent-centered services to young children with a hearing loss offering families hope, guidance and encouragement.*

League for the Hard of Hearing

50 Broadway, 6<sup>th</sup> Floor

New York, NY 10004

(917) 305-7700

[www.lhh.org](http://www.lhh.org)

*Non-profit organization striving to improve the quality of life of people with hearing loss*

Let Them Hear Foundation Advocacy

Program

(877) 432-7435

[www.deafspecialeducation.com](http://www.deafspecialeducation.com)

*Resource center for parents and professionals working with children with disabilities.*

Marion Downs National Center for Infant Hearing

University of Colorado at Boulder  
Campus Box 409  
Boulder, CO 80309  
(303) 492-6283

<https://www.mariondowns.com/>

*Resources, education and research to support the needs of individuals who are deaf and hard of hearing, their families, the community and hearing health professionals.*

MED-EL Corporation

222 East NC Hwy 54, Suite B-180  
Durham, North Carolina 27713  
(919) 572-2222

[www.medel.com](http://www.medel.com)

*Product information on cochlear implants.*

My Baby's Hearing

[www.babyhearing.org](http://www.babyhearing.org)

*A website created to answer parents' questions about infant hearing screening and follow up testing, steps to take after diagnosis of hearing loss, hearing loss & hearing aids, and language & speech.*

National Association of the Deaf

814 Thayer Ave.  
Silver Springs, MD 20910  
(301) 587-1788

[www.nad.org](http://www.nad.org)

*Nation's civil rights organization of, by and for deaf and hard of hearing individuals in the United States of America.*

National Center for Hearing Assessment and Management (NCHAM)

[www.infantheating.org](http://www.infantheating.org)

*National Resource Center for the implementation and improvement of comprehensive and effective Early Hearing Detection and Intervention (EHDI) systems.*

National Cued Speech Association

23970 Hermitage Rd.  
Shaker Heights, OH 44122  
(800) 459-3529

<http://www.cuedspeech.org/>

*An advocacy organization that focuses on outreach, family and educator support, as well as community-based education in the form of Cue Camps and sponsored workshops. Also provides instructor certification for teaching Cued Speech classes*

National Institute on Deafness and Other Communication Disorders (NIDCD)

31 Center Dr. , MSC 2320  
Bethesda, MD 20892-2320  
(301)496-7243

[www.nidcd.nih.gov/health/hearing](http://www.nidcd.nih.gov/health/hearing)

*Researches the processes of hearing to acquire new knowledge to help prevent, detect, diagnose, and treat the disability.*

Raising and Educating Deaf Children

<http://raisingandeducatingdeafchildren.org/>

*Information for parents of children with a hearing loss.*

Hearing Loss Association of America

<http://www.shhh.org>

*A national organization representing people with hearing loss. Provides assistance and resources for people with hearing loss and their families to learn how to adjust to living with hearing loss.*

Sign with Your Baby

[www.sign2me.net](http://www.sign2me.net)

*ASL-based baby sign language products.*

SKI\*HI Institute

Utah State University  
6500 Old Main Hill  
Logan, UT 84322-6500  
(435) 797-5600

[www.skihi.org](http://www.skihi.org)

*Early intervention curriculum for children with hearing loss.*

Specializing in Information for the Deaf and  
Hard of Hearing

[www.listen-up.org](http://www.listen-up.org)

*Advocates for the rights of children with  
hearing loss.*

Starkey Hearing Foundation

1-800-648-HEAR V/TDD

<http://www.starkeyhearingfoundation.org/>

[www.starkeyhearingfoundation.org/hear-  
now.php](http://www.starkeyhearingfoundation.org/hear-now.php)

*A national non-profit program committed to  
assisting those permanently residing in the  
U.S. who are deaf or hard of hearing and  
have no other resources to acquire hearing  
aids.*

WrightsLaw

[www.wrightslaw.com](http://www.wrightslaw.com)

*Special education law and advocacy for  
parents, advocates and educators of  
children with disabilities.*

**Websites**

- ASL Fingerspelling/Games- <http://www.asl.ms/>
- ASL Info - <http://www.nidcd.nih.gov/health/hearing/pages/asl.aspx> Boggle Fingerspelling - <http://www.lifeprint.com/asl101/pages-layout/teachingasl/boggle.htm>
- Deaf Linx - <http://www.deaflinx.com>
- Deaf Related Terms Hangman Game - <http://www.quia.com/hm/3448.html>
- Deaf Resource Library - <http://www.deaflibrary.org/>
- DeafZONE Resources - <http://www.deafzone.com/>
- Fingerspelling Fonts – <http://www.lifeprint.com/asl101/pages-layout/gallaudettruetypefont.htm>
- Fingerspelling Concentration - <http://www.surfnetkids.com/games/signlanguage-c.htm>
- Handspeak- Formerly on DeafWorldWeb - <http://www.handspeak.com>
- Sign Language - <http://www.surfnetkids.com/signlanguage.htm>
- Sign Writing - <http://www.SignWriting.org/>
- Sign the Alphabet - <http://www.funbrain.com/signs/index.html>
- Total Communication - <http://deafness.about.com/cs/communication/a/totalcomm.htm>
- Visual Language and Learning (VL2)- <http://vl2.gallaudet.edu>
- Visual Language and Learning Storybook Apps - <http://vl2storybookapps.com>

## Organization Phone Numbers

American Hearing Research Foundation  
312-726-9670

AT&T National Special Needs Center  
800-233-1222

Council for Exceptional Children  
703-620-3660

Federation for Children with Special Needs  
617-236-7210

National Captioning Institute  
703-917-7600

National Information Center on Deafness  
202-651-5051

National Institute on Deafness and Other  
Communication Disorders Clearinghouse  
800-241-1044

SEE Center for the Advancement of Deaf  
Children  
562-430-1467

Sertoma  
816-333-8300

Software to Go, Gallaudet University  
202-651-5000

Telecommunications for the Deaf  
301-593-3786

World Recreation Association of the Deaf  
(661) 952-7752

## **THERAPY MATERIALS**

Discovery Toys, [www.discoverytoysinc.com](http://www.discoverytoysinc.com), (800) 426-4777

Lakeshore, [www.lakeshorelearning.com](http://www.lakeshorelearning.com), (800)421-5354

LinguiSystems, [www.linguisystems.com](http://www.linguisystems.com), (800) 776-4332

Super Duper, [www.superduperinc.com](http://www.superduperinc.com), (800) 277-8737

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**BOOKS**

A Child Sacrificed to the Deaf Culture, by Tom Bertling. Wilsonville, OR: Kodiak Media Group, (1994)

A Personal Quest for Educational Excellence for a Hard of Hearing Child, Self Help for Hard of Hearing, [www.shhh.org](http://www.shhh.org)

Auditory Verbal Therapy for Parents and Professionals, Warren Estabrooks (1994), [www.agbell.org](http://www.agbell.org), (202) 337-8314

Balancing Act, by Virginia M. Scott. Butte Publications, Inc., (1997), [www.buttepublications.com](http://www.buttepublications.com)

Bilingual Deaf and Hearing Families: Narrative Interviews by Barbara Bodner-Johnson and Beth Sonnenstrahl Benedict (2012) Gallaudet University Press, <http://gupress.gallaudet.edu/bookpage/BDHFbookpage.html>

Choices in Deafness: A Parent's Guide a collection of family stories about their deaf child and the communication method they use. Edited by Sue Schwartz, Ph.D. Woodbine House, [www.agbell.org](http://www.agbell.org), (202) 337-8314

Cochlear Implantation for Infants and Children: advances/senior editor, Graeme M. Clark: editors, Robert S.C. Cowan, Richard C. Dowell. Published by San Diego: Singular Pub. Group, (1997), [www.agbell.org](http://www.agbell.org), (202) 337-8314

Cochlear Implants: A handbook, by Bonnie Poitras Tucker. Published by Jefferson, N.C. McFarland, (1998), [www.agbell.org](http://www.agbell.org), (202) 337-8314

Cochlear Implants and Children, Spencer, Patricia Gallaudet University Press (2002)

Cochlear Implants: Audiological Foundations, (1993) Singular Publishing Group

Cochlear Implants in Young Deaf Children, (1989) Boston: College Hill Press

Come Sign with Us: Sign Language Activities for Children, by Jan C. Hafer and Robert M. Wilson. Illustrated by Paul Setzer

Cued Speech Resource Book for Parents of Deaf Children, Second Edition, Orin R. Cornett, Mary Elsie Daisey, (2001), Cued Speech Discovery 800-459-3529, [www.cuedspeech.org](http://www.cuedspeech.org)

Dancing without Music: Deafness in America, Beryl Leiff Benderly (1980), Anchor/Doubleday  
Deaf History Unveiled: Sixteen Essays Offer the Current Results of Harlan Lane, Renate Fischer, Margaret Winzer, William McCagg, and 12 Other Noted Historians in this Field, John Vickrey Van Cleve, Editor

Deafness in Perspective, (1986), College-Hill Press

Deaf President Now: The 1988 Revolution at Gallaudet University, John B. Christiansen and Sharon N. Barnartt

Early Childhood Deafness, Ellen Kurtzer-White and David Luterman (2001), York Press

Facilitating Hearing and Listening in Young Children, Carol Flexer, Singular Publishing Group, 1994, [www.agbell.org](http://www.agbell.org), (202) 337-8314

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50 FAQs About AVT, Warren Estabrooks, editor, (2001) Learning to Listen Foundation

Foundations of Bilingual Education and Bilingualism, Baker, C. (1996) Clevedon: Multilingual Matters

Handtalk School, words and sign language depict a group of students involved in putting on a thanksgiving play at a school for deaf children, by Mary Beth, New York: Toronto: New York: Four Winds Press, Collier Macmillan Canada, Maxwell Macmillan International, (1991)

Hear and Listen! Talk and Sing!, Warren Estabrooks, Lois Birkenshaw-Fleming, (1994), [www.agbell.org](http://www.agbell.org), (202) 337-8314

Hearing Impaired Infants: Support in the First Eighteen Months, Edited by Jacqueline Stokes (1999), [www.agbell.org](http://www.agbell.org), (202) 337-8314

Hearing Loss in Children, Pediatric Clinics of North America. Vol 46, 1999

How the Student with Hearing Loss can Succeed in College: A Handbook for Students, Families and Professionals, edited by Carol Flexer, Ph.D., Denise Wray, Ph.D., and Ron Leavitt, M.S. , Foreword by Mark Ross, Ph.D. Alexander Graham Bell Association for the Deaf, Inc., (1990), [www.agbell.org](http://www.agbell.org), (202) 337-8314

IDEA Advocacy for Children who are Deaf or Hard of Hearing: A Guide for Parents of Children who are Deaf or Hard of Hearing and the Professional Involved in their Education, by Bonnie Poitras Tucker, J.D. Singular Publishing Group, (1997), [www.agbell.org](http://www.agbell.org), (202) 337-8314

Infants and Toddlers with Hearing Loss: Family-Centered Assessment and Intervention, edited by Jackson Roush and Noel D. Matkin (1994), [www.agbell.org](http://www.agbell.org), (202) 337-8314

It Takes Two to Talk: A Parent's Guide to Helping Children Communicate, by Ayala Manolson, English and Spanish, [www.agbell.org](http://www.agbell.org), (202) 337-8314

Kid-Friendly Parenting with Deaf and Hard of Hearing Children, by Daria J. Medwid, Denise Chapman Weston. Washington, D.C. Clerc Books, (1995) [www.agbell.org](http://www.agbell.org), (202) 337-8314

Listening and Talking: A Guide to Promoting Spoken Language in Young Hearing-Impaired Children, by Elizabeth B. Cole, Ed.D. (1992), [www.agbell.org](http://www.agbell.org), (202) 337-8314

Listening to Learn: A Handbook for Parents with Hearing-Impaired Children, by Arlie Adam, Pam Fortier, Gail Schiel, Margaret Smith and Christine Soland (1990) [www.agbell.org](http://www.agbell.org), (202) 337-8314

Literacy Learning for Children Who are Deaf or Hard of Hearing, by Lyn Robertson, Ph.D. (2000), [www.agbell.org](http://www.agbell.org), (202) 337-8314

Maximizing Auditory and Speech Potential for Deaf and Hard of Hearing Children, Hearing Journal, November 1999, Vol. 52, Num. 11, [www.oraldeafed.org](http://www.oraldeafed.org), Oberkotter Foundation 877-672-5332

My Sense of Silence: Memoirs of a Childhood with Deafness, by Lennard J. Davis. Urbana: University of Illinois Press, (2000)

Negotiating the Special Education Maze: A Guide for Parents and Teachers, Winifred Anderson, (1990) Woodbine House

Never the Twain Shall Meet: Bell, Gallaudet, & the Communications Debate, Richard Winefield

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No Dad, It Does Not Involve a Hippopotamus!, Keith, Mark, (2012), CreateSpace Independent Publishing.  
Not Deaf Enough: Raising a Child Who is Hard of Hearing with Hugs, Humor, and Imagination, by Patricia Ann Morgan Candish (1996) [www.agbell.org](http://www.agbell.org), (202) 337-8314

Our Forgotten Children: Hard of Hearing Pupils in the Schools, edited by Julia Davis, Ph.D., SHHH Publications, (1990), [www.shhh.org](http://www.shhh.org)

Parenting with Love and Logic: Teaching Children Responsibility, Foster Cline, Jim Fay (1990) Love & Logic Press

Parents & Teachers: Partners in Language Development, by Audrey Simmons-Martin, Ph.D. and Karen Glover Rossi, M.A. (1990) [www.agbell.org](http://www.agbell.org), (202) 337-8314

Pediatric Cochlear Implants: An Overview of Options and Alternatives in Education and Rehabilitation, Judith Barnes, (1994) [www.agbell.org](http://www.agbell.org), (202) 337-8314

Raising and Educating a Deaf Child, by Marc Marschart. New York: Oxford University Press, (1997), [www.buttepublications.com](http://www.buttepublications.com)

Reading Between the Lips: A Totally Deaf Man Makes It in the Mainstream, by Lew Golan (1995), [www.agbell.org](http://www.agbell.org), (202) 337-8314

Signs for Me: Basic Sign Vocabulary for Children, by Gahan, B., & Dannis, J. (1990) Berkeley, CA Dawn Sign Press, [www.dawnsignpress.com](http://www.dawnsignpress.com), (858) 625-0600

Sounds Like Home: Growing Up Black and Deaf in the South, by Mary Hering Wright

So Your Child Has a Hearing Loss: Next Steps for Parents, Washington, DC: AG Bell (2000), [www.agbell.org](http://www.agbell.org), (202) 337-8314

Special Children, Challenged Parents: the Struggles and Rewards of Raising a Child with a Disability, by Robert A. Naseef. Secucus, N.J.: Carol Pub. Group, (1997)

Talk with Me, Ellyn Altman, Washington, DC: AG Bell (1988), [www.agbell.org](http://www.agbell.org), (202) 337-8314

The Deaf Child in the Family and at School, Spencer, Erting and Marschark, (2000) Lawrence Erlbaum Associates

The Feel of Silence: A Compelling Memoir about a Lawyer and Professor with a Profound Hearing Loss Surviving the Trials of Accommodating the Hearing World, by Bonnie Poitras Tucker, J.D. Temple University Press, (1996) (301) 587-1788, [www.shhh.org](http://www.shhh.org)

The Mask of Benevolence: Disabling the Deaf Community, by Harlan Lane, New York: Knopf, (1992), [www.dawnsignpress.com](http://www.dawnsignpress.com), (858) 625-0600

The New Language of Toys, Sue Schwartz, Joan E. Heller Miller (1996), Woodbine House, [www.agbell.org](http://www.agbell.org), (202) 337-8314

The Politics of American Sign Language in Deaf Education, Nover, S. & Ruiz, R. (1994) Brenda Schick and Mary P. Moeller (Eds.), Boys Town National Research Hospital: Omaha, Neb.

The Signed English School Book, Harry Bornstein (1987) Kendall Green Publications  
2015 Edition

The Signing Family: What Every Parent Should Know about Sign Communication, by David A. Stewart, Washington, DC: Gallaudet University Press, (1998), [www.buttepublications.com](http://www.buttepublications.com)

The Silent Garden: Raising Your Deaf Child, Ogden, P.W. & Lipsett, (1982), New York: St. Martin Press, [www.agbell.org](http://www.agbell.org), (202) 337-8314

The Young Deaf Child, by David M. Luterman, (1999), York Press

Train Go Sorry: Inside a Deaf World, Leah Hager Cohen (1994), Houghton Mifflin

Turning the Tide: Making Life Better for Deaf and Hard of Hearing Schoolchildren by Gina A. Oliva and Linda Risser Lytle (2014), Gallaudet University Press, <http://gupress.gallaudet.edu/bookpage/TTTbookpage.html>

25 Ways to Promote Spoken Language in Your Child with a Hearing Loss, by Amanda Mangiardi (1995), [www.agbell.org](http://www.agbell.org), (202) 337-8314

We Can Hear and Speak, The Power of Auditory-Verbal Communication for Children Who are Deaf or Hard of Hearing, Parents and Families of National Communication, Inc. (1998), [www.agbell.org](http://www.agbell.org), (202) 337-8314

What's That Pig Outdoors?, an inspiring autobiography of Henry Kisor, oral deaf book editor and columnist for the Chicago Sun Times, Henry Kisor, (1990)

When Bad Things Happen to Good People, Kushner, H. (1981) New York: Avon Books

When the Mind Hears, by Harlan Lane

When the Phone Rings, My Bed Shakes: Memoirs of a Deaf Doctor, by Philip Zazove, M.D. (1994,) [www.agbell.org](http://www.agbell.org), (202) 337-8314

**Florida Funding Sources**

Local Service Clubs such as Lion's, Rotary, Kiwanis, and Sertoma frequently are open to considering providing funds or matching funds to support hearing aids and services for children residing in their communities. Contact people for these clubs can often be found in your local telephone book.

Sertoma Speech & Hearing Foundation of FL, Inc.

4443 Rowan Road

New Port Richey, FL 34653

Contact: Craig McCart

Phone: 727-834-5479

[www.familyhearinghelp.org](http://www.familyhearinghelp.org)Email: [mccart@allkids.org](mailto:mccart@allkids.org)

## **National Funding Sources**

### A G Bell

3417 Volta Place NW  
Washington, DC 20007-2778  
(202) 337-5220

[www.agbell.org](http://www.agbell.org)

*Resources for financial assistance include habilitation, rehabilitation services, hearing aids and other assistive devices*

### International Association of Lion Clubs

300 West 22<sup>nd</sup> Street  
Oak Brook, IL 60521  
(630) 571-5466

[www.lionsclubs.org](http://www.lionsclubs.org)

### AUDIENT Program

President: Mike Langhout  
901 Boren Ave, Suite 810  
Seattle, WA 98104-3534  
Voice: 206-838-7194  
Toll Free: 1-877-AUDIENT (1-877-283-4368)  
Fax: 206-838-7195

E-mail: [info@audientalliance.org](mailto:info@audientalliance.org)

*Assists income qualified hard of hearing people nationwide to access quality hearing aids and related care at significantly reduced costs. The AUDIENT program was developed by the non-profit Northwest Lions Foundation for Sight & Hearing and made possible through the help of dedicated providers and suppliers.*

### Easter Seals

230 West Monroe Street, Suite 1800  
Chicago, IL 60606  
Voice: 800-221-6827  
TTY: 312-726-4258

E-mail: [info@easter-seals.org](mailto:info@easter-seals.org)

*Provides referrals to local programs for financial aid for devices or services and also provides financial aid for assistive technology. State and federal laws determine referral requirements and funding opportunities.*

### Hope for Hearing Foundation & Hearing Aid Bank

806 West Adams Boulevard  
Los Angeles, CA 90007-2505  
E-mail: [director@hope4hearing.org](mailto:director@hope4hearing.org)

*Hearing aids are made available by the Hope for Hearing Foundation & Hearing Aid Bank for use by the hearing impaired who have no other resources for attaining an instrument. The Foundation/Bank does not dispense hearing aids but will refer to a licensed hearing aid dispenser. For those who can afford it, a \$50 donation is accepted to cover the cost of a custom-made earmold and dispenser consultation.*

### Funding Assistance for Audiology Services

<http://www.asha.org/public/coverage/p4AudFundingResources/>  
[www.asha.org/familyfunding](http://www.asha.org/familyfunding)

### Children's Hearing Aid Bank

Hearing Aid Foundation, Inc.  
20361 Middlebelt  
Livonia, MI 48152  
(800) 521-5247

### Miracle Ear Children's Foundation

P.O. Box 59261  
Minneapolis, MN 55459-0261  
(800) 234-5422

### Piolet International

244 College Street  
Macon, GA 31201

### Disabled Children's Relief Fund (DCRF)

PO Box 7420

2015 Edition

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Freeport, NY 11520

(478) 743-7403

Hear Now

9745 E. Hampden Avenue  
Suite 300  
Denver, CO 80321  
(800) 648-4327

The Starkey Fund

6700 Washington Ave. SO  
Eden Prairie, MN 55344  
1-800-328-8602

Kiwanis, International

3636 Woodview Place  
Indianapolis, IN 46268-3196  
(317) 875-8755  
(800) 549-2647

SSI (Supplemental Security Income)

1-800-772-1213

Quota International

1420 21<sup>st</sup> Street NW  
Washington, DC 20036  
(202) 331-9694

CNI Center for Hearing

<http://www.thecni.org/hearing/assistance.htm>

If you have private insurance, check the coverage for your child's needs including audiology testing, hearing aids, follow-up services, and speech/ language/auditory therapy. It may be necessary to advocate and educate insurance companies and/or your employer in order to obtain any coverage for your child's needs.

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## VIDEOS

### **Captioned Media Program**

The Captioned Media Program loans media without rental fees. The films are open-captioned and there is no need for a decoder. Funded by the US Department of Education. Includes prepaid return labels. Deaf and hard of hearing persons, teachers, parents, and others may borrow materials. Other services include provision of free captioning information.

Over 4,000 educational and general-interest open-captioned titles are available. Educational titles include topics in school subject areas, preschool through college. Lesson guides accompany educational videos. General-interest titles include classic movies and special-interest topics such as travel, hobbies, recreation, and others. Approximately 300 new titles are added each year based on users' recommendations.

### **Captioned Media Program National Association of the Deaf**

1447 E. Main Street  
Spartanburg, SC 29307  
(800) 237-6213

**American Culture: The Deaf Perspective** (4 tapes) Available from the San Francisco Public Library, TDD (415) 557-4433 or V (415) 557-4434

**Auditory-Verbal Therapy for Parents and Professionals:** Introduces AV therapy, speech language development, etc. Via parent stories and taped therapy sessions, AG Bell (202) 337-8314

**Beginnings: A program that examines all communication choices without bias;** from Beginnings, V/TTD (919) 850-2746

**Boy's town website** – [www.boystownhospital.org](http://www.boystownhospital.org)

**Building Conversations: A Family Sign Language Curriculum,** produced by Boys Town National Research Hospital (2 tapes)

**Come Sign with Us:** Children can learn sign language from popular activities featured in the best-selling book: "Come Sign With Us" on videotape. Gallaudet University Press

**Computer-Assisted Notetaking (CAN):** You can see it-visual technologies for Deaf and Hard of Hearing People, Gallaudet University

**Do You Hear That?** Shows auditory-verbal therapy session with children with hearing aids or cochlear implants; for parents, educators and professionals, AG Bell (202) 337-8314

**Dreams Spoken Here:** A film exploring oral deaf education from infancy through adulthood available in 20 and 60-minute formats. <http://www.oraldeafed.org/> or (877) 672-5332

**Families with Hard of Hearing Children what if your Child has a Hearing Loss?** Parents and professionals talk about having a hard-of-hearing child, available from Hope, Inc. 1856 North 1200 East North, Logan, Utah 84321, (435) 245-2888

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**Home Total Communication Video Tapes:** Shows over 1000 signs, available from Hope, Inc. 1856 North 1200 East North, Logan, Utah 84321, (435) 245-2888

**I Can Hear!** Describes the auditory-verbal approach for developing speech and Language; families and professionals profiles, available from AG Bell (202) 337-8314

**I See What You Say:** A 12-minute introduction to Cued Speech from the Cued Speech Center, (800) 459-3529

**Language Says It All:** Los Angeles, CA TRIPOD Productions, (1987)

**Lost Dreams and Growth:** A 70-minute videotape, by Ken Moses. Available from Resource Networks, (847) 864-4522, 930 Maple Ave. Evanston, IL 60202 (1988)

**Mother's Look at Total Communication:** A VHS tape available by Modern Signs Press

**Parents' Guide to Deafness and Hearing Loss:** Covers such topics, as how to communicate, where to go for help and what the child's educational experience will be. Madison, WI: University of Wisconsin Hospital and Clinics, Dept. of Outreach Education.

**Positive Parenting: A Family Sign Language Curriculum.** Produced by the Center for Hearing Loss in Children (2 tapes)

**Parents' Guide to Deafness and Hearing Loss:** Covers such topics as how to communicate, where to go for help and what the child's educational experience will be. Madison, WI: University of Wisconsin Hospital and Clinics, Dept. of Outreach Education. (1 tape)

**Show and Tell:** Explains the challenges hearing impairments impose on mainstream teachers, from the Clarke School, available from AG Bell (202) 337-8314

**Signed Cartoons:** including Superman, Casper, Raggedy Ann, Three Bears, Popeye, and Three Little Pigs, available from HOPE Inc. (435) 245-2888

**Speaking for Myself:** A film about auditory/oral communication and education available in a 10-minute format, [www.oraldeafed.org](http://www.oraldeafed.org) or (877) 672-5332

**The Kids with the Hi-Tech Ears: Supporting Students with Cochlear Implants in the Classroom;** from SCS, Inc., (303) 639-5806

**"Through Your Child's Eyes":** Movie on American Sign Language created by the California Department of Education and California State University, Northridge. View the video at [www.throughyourchildseyes.com](http://www.throughyourchildseyes.com).

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## INTRODUCTION TO “QUESTIONS PARENTS COULD ASK

Learning your child has hearing loss can be overwhelming with all the information and decisions parents face. Parents of children who have hearing loss and professionals in the field of hearing loss developed the following sets of questionnaires. These questions are not meant to be comprehensive, but rather they are intended to open a dialogue between professionals and parents. The order of the questions is not significant, as you will have a better idea of how to approach each topic. Just remember this: you are your child’s best advocate. The more information you have, the more assistance you can offer your child.

### QUESTIONS TO ASK EAR, NOSE AND THROAT DOCTOR (ENT)

Name of ENT: \_\_\_\_\_

Phone: \_\_\_\_\_

Appointment Date: \_\_\_\_\_

Next Appointment Date: \_\_\_\_\_

Test Name: \_\_\_\_\_

Name/Location of Test: \_\_\_\_\_

**An Ear, Nose and Throat (ENT) doctor is a doctor specially trained to diagnose and treat disorders of the ear or nose or throat.**

An Otologist, Neurotologist Otolaryngologist or Ear, Nose, Throat (ENT) Physician can help by confirming that there is not a medically treatable condition in your child's outer, middle, or inner ear that is causing the hearing loss. They can answer your questions about medical or surgical treatments. An ENT can also assist your family by conducting a medical assessment in a timely manner. This will ensure intervention is done within the guidelines of “1-3-6” (Hearing Screening before 1 month of age, Hearing Diagnostic Audiological Evaluation by 3 months of age, and Early Intervention by 6 months of age.)

An ENT who has training and experience to evaluate and treat infants and young children will offer the best care for your baby.

#### Questions about my/our child’s hearing loss:

1. How familiar are you with permanent childhood hearing loss?

\_\_\_\_\_

\_\_\_\_\_

2. Do you have the most recent report from my child’s audiologist?

\_\_\_\_\_

3. What type of hearing loss does my child have (sensorineural, conductive or mixed)?

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4. Are there additional tests (i.e. urinalysis, CT scan, MRI, EKG, blood tests, or vision screening) or consultations with other health professionals that need to be done to rule out possible causes of hearing loss, including other related problems in addition to hearing loss?

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5. Can you tell if my child's hearing loss will get worse or change?

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6. Is there some medically treatable cause for my child's hearing loss?

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7. What treatments are available (i.e. ventilation or pressure equalization tubes, other surgery, antibiotics, and cochlear implants)?

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8. Would my child benefit from a hearing aid? If so, how? Do I need your signature to allow my child to be fit with hearing aids?

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9. What is your role in my child's hearing loss (one-time consultation or on-going)? Will you confer with my child's other professionals (i.e. audiologist, primary care provider, early interventionists)?

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10. Would you suggest genetic counseling for our family?

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11. How do I describe these results to family members?

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12. Do I need to restrict my child's activities in any way?

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\_\_\_\_\_

13. If hearing aids and other more conservative measures don't work, will my child be a candidate for a cochlear implant?

\_\_\_\_\_

\_\_\_\_\_

14. If a cochlear implant is necessary, who would you recommend perform the surgery and who would you recommend would provide the audiological rehabilitation?

\_\_\_\_\_

\_\_\_\_\_

**QUESTIONS TO ASK THE SPEECH-LANGUAGE PATHOLOGIST**

A speech-language pathologist is trained to assess speech and language skills of children and adults. They may work in schools, hospitals, universities or in private practice. If a child or an adult has a communication problem, the speech-language pathologist, with the family, will help determine the best approach for therapy.

Many speech-language pathologists have limited training or experience with deaf or hard of hearing children. A different approach is required when a child has never heard sounds correctly. There may be different things to be aware of when developing speech and language with a child who had a hearing loss. For example children with a hearing loss often leave off final sounds or sounds that they do not hear.

**You might ask the speech-language pathologist the following questions:**

1. What kind of specific training have you had for working with deaf or hard of hearing children?

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2. What experience have you had with deaf or hard of hearing children? Could you describe their hearing losses?

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3. How many of your current clients have hearing losses? What are their ages?

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4. What communication philosophy or method do you have experience with? (Total Communication, Oral, Auditory Verbal, Cued Speech, American Sign Language-Bilingual/Bi-modal, and etc.) How do you decide what child needs which method?

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5. If you sign, which sign language system do you prefer? (Signing Exact English, American Sign Language, Signed English)

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6. If you use the Oral approach what strategies do you use? (Auditory-Verbal, oral/aural, etc.)

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7. What kinds of things do you do to evaluate communication skills?

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8. How do you monitor the speech and language progress of a child and what tools do you use?

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9. What kind of parent involvement do you encourage?

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10. How do you coordinate your efforts with other professionals such as the audiologist, teacher of the deaf, educational interpreter and other school personnel?

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11. Do you have experience with children with cochlear implants?

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12. Would it be possible to observe a session with a deaf or hard of hearing child?

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13. How do you determine an amount of time to work on speech, language and/or auditory training?

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14. Do you follow a specific instructional method or curriculum, such as Ling?

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15. Do you have an auditory curriculum which you prefer such as; Beckman tests, SPICE Auditory curriculum or the DASL Auditory Curriculum?

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16. How can I get financial assistance to help cover costs?

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## QUESTIONS TO ASK AUDIOLOGISTS

An audiologist is trained to evaluate hearing. An audiologist may describe hearing loss, explain hearing test results, recommend hearing aids or a cochlear implant, and may dispense and fit hearing aids or provide auditory training and discuss communication options. Not all audiologists are specifically trained to evaluate and provide services to infants and young children. It is recommended that you seek an audiologist who has experience and training in providing services to young children.

The following list of questions may be helpful when working with your child's audiologist. Use only the questions that apply to your child's hearing loss.

### Details about my/our child's hearing loss:

1. What kind of hearing loss does my child have? Type: sensorineural, conductive, or mixed. Degree: mild, moderate, severe, profound?

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2. Do both ears have the same loss?

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3. Is the loss permanent or temporary?

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4. Does my child have any usable hearing? What will she/he be able to hear?

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5. How will the hearing loss affect my child's speech? Understanding of language?

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6. What are the possible causes of my child's hearing loss?

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7. If I plan to have other children, should I seek genetic counseling?

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8. How often do I need to have my child's hearing tested?

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9. How do I get a copy of these results?

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10. Can you tell if my child's hearing loss is progressive?

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**Early Intervention:**

1. Is my child eligible for early intervention?

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2. What can I do at home with my child to help?

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**Hearing Aids/Cochlear Implants:**

1. Does my child need a hearing aid? What are my options? Should she/he have an aid in both ears?

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2. What is the cost of hearing aid?

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3. Can you connect me with a loaner program for hearing aids?

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4. What will my child hear with the hearing aids?

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5. Where can I go for a cochlear implant evaluation? Why do you think a cochlear implant might help even more than hearing aids?

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6. What financial assistance is available?

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7. How often will my child need new earmolds? New aids?

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8. What should I do if my child rejects the hearing aid?

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9. How can I keep the hearing aids from damaging my child's remaining hearing?

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10. What do I need to know about caring for hearing aids?

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**Communication Options/Education:**

1. How will my child's hearing loss affect his educational experience?

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2. What are my child's communication options? (sign language, oral, total communication, cued speech)

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3. When should I begin school, therapy, or classes for my child? What is available in this area?

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**Support:**

1. Is there a parent group in my area? Where? Whom should I contact?

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2. How can you help me meet another parent with a child with similar hearing loss to my child?

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3. What other resources are available for me to learn about hearing loss---books, videotapes, films, websites, and correspondence courses? Where?

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# APPENDICES



- *Audiogram*
- *Effects of Hearing Loss*
- *Suggestions for Beginning Vocabulary*
- *Mainstream Kindergarten Readiness Skills*
- *Questions and Answers*

## Description of an Audiogram

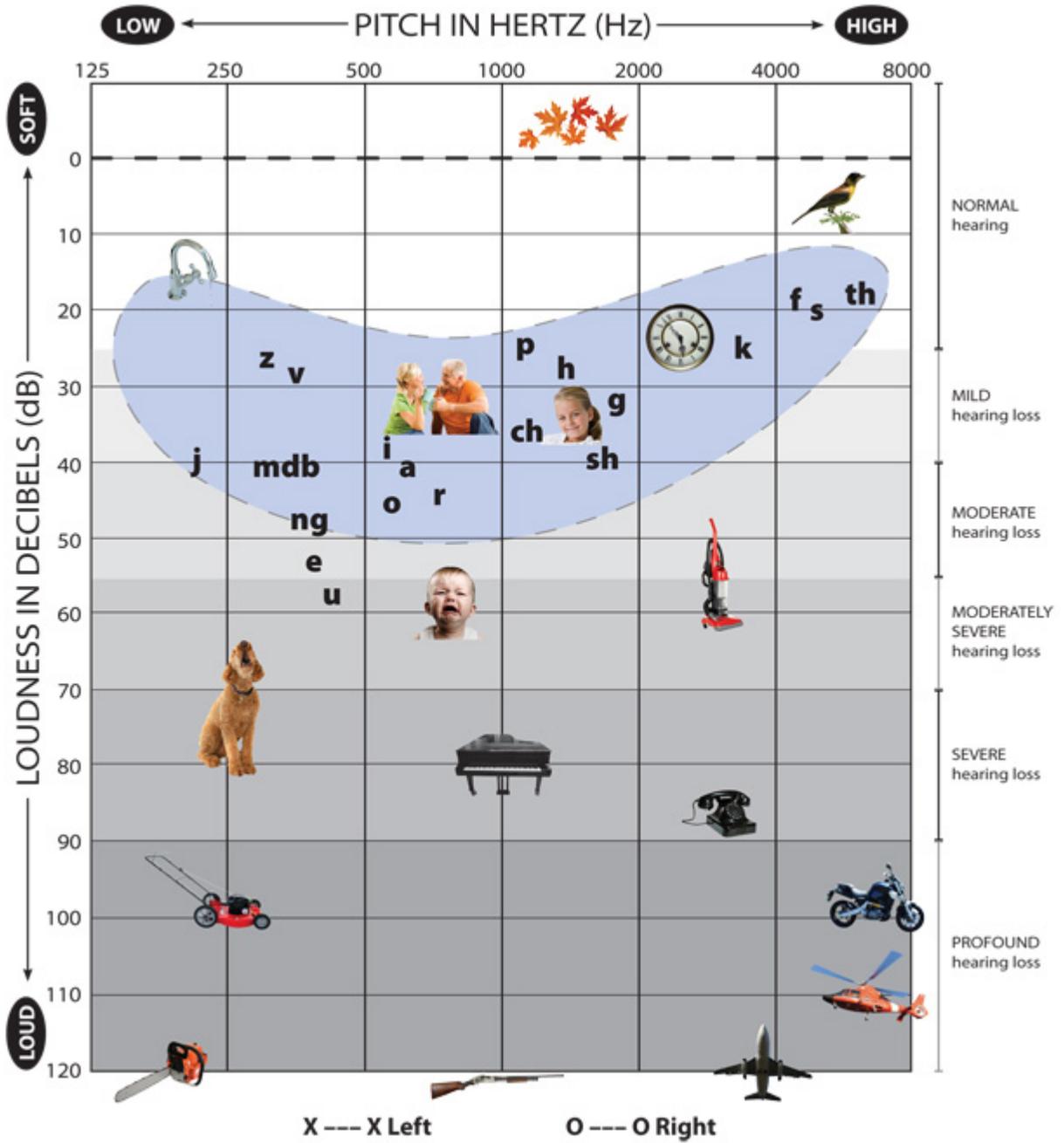
An audiogram is a picture of ability to detect sounds at different pitches. Your hearing test results are recorded on an audiogram. The audiogram below graphs where different sounds are located on the audiogram. The banana shaped area represents all the sounds that make up the human voice when speaking at normal conversational levels.

**Frequency:** The vertical lines on an audiogram represent pitch or frequency. The sounds on the left side of the audiogram represent a very low pitch and each vertical line to the right represents a higher pitch sound. The most important pitches for speech are between 500 -4000 Hertz (Hz).

**Intensity:** The horizontal lines represent loudness or intensity. The unit for intensity measurement is decibel (dB). The 0 dB line near the top of the audiogram represents the average loudness a young adult can barely detect sounds of different pitches. Each horizontal line below represents louder sounds.

**Hearing Level:** The audiologist determines the quietest level (threshold) a person can hear a particular frequency and indicates that on the audiogram. Since the quieter intensity is at the top of the audiogram, hearing levels marked on the upper part of the audiogram are closest to normal hearing than those at the very lowest part are closest to no hearing, or complete deafness. Therefore, the greater the degree of hearing loss, the further down on the audiogram it appears.

- **Air Conduction:** Hearing level is determined using headphones and is marked as a circle for the right ear (red is the designated color) and an X for the left ear (blue is the designated color).
- **Bone conduction:** Hearing level is determined using a vibrator placed on the mastoid bone behind the ear. A bracket is the symbol that designates the bone conduction response.
- **Sound field:** Hearing level is determined using a loudspeaker. An S is used to indicate the sound field response. A indicates ability to hear in soundfield while wearing hearing aid(s).
- **Normal Hearing:** Normal hearing in young children is defined as 0-15 dB.



The shaded area, called the speech banana, represents conversational speech

## Suggestions for Beginning Vocabulary

### Common Phrases

Bye-bye  
 Look at that  
 It's too heavy  
 Ow, it's sore  
 I want a \_\_\_\_\_  
 No-no-no, don't touch

Uh-oh it fell down  
 That's pretty  
 m-m-m that's good  
 what a mess  
 that's funny  
 stop it

brr that's cold  
 help me  
 I want more  
 Pick it up  
 Wait a minute

### Action Words

Push push it down  
 Mmm smell the flower  
 Wake up  
 Pop-pop the bubbles  
 Shh go to sleep  
 Sit down  
 Wash wash your hands  
 Have a drink  
 Blow blow the feather  
 Walk walk walk  
 Bounce bounce the ball

Go up up up the stairs/lift  
 me up  
 It goes round and round  
 Cut cut the banana  
 Brush your hair/teeth  
 Jump jump jump  
 That's hot  
 It's all gone  
 It's dirty  
 It's soft  
 It's broken  
 It's wet

It's sticky  
 The watch goes tic tock  
 Hi baby  
 I'm Mommy/Daddy  
 That's my shoe  
 Slide up, up up weee  
 That's my eye/nose  
 /mouth  
 Look at the fish  
 The clown says ha ha ha  
 Santa says ho ho ho

### Pronouns

That's mine  
 Give it to me

### Animal Sounds

Cow—moo  
 Cat—meow  
 Pig—oink oink  
 Bird—chirp chirp  
 Owl—hoo

Dog—bow-wow  
 Lamb—baa  
 Frog—hop hop hop  
 Duck—quack quack  
 Lion—roar roar

Horse—neigh  
 Fish—swish  
 Chicken—cluck  
 Monkey—ee ee ee  
 Bear—grr grr

### Vehicles

Boat – p-p-p  
 Airplane—aahh

Car—beep beep  
 Train—choo choo choo

Bus—bu bui bu

*Excerpted and adapted from Judith I. Simser, O.Ont,B.Ed.,Cert.AVT, Aural Habilitation Program  
 Children's Hospital of Eastern Ontario*

## Mainstream Kindergarten Readiness Skills

### Understand and use the following words:

Yesterday	Nighttime	Rectangle
Today	Square	Major colors
Tomorrow	Triangle	
Morning	Circle	

### Understand Boehm Concepts:

Top	Corner	Match
Through	Several	Always
Away	Behind	Medium-sized
Next to	Row	Right
Inside	Different	Forward
Some but not many	After	Zero
Middle	Almost full	Above
Few	Half	Every
Farthest	Center	Separated
Around	As many as	Left
Over	Side	Pair
Widest	Beginning	Skip
Most	Other	Equal
Between	Alike	In order
Whole	Not first or last	Third
Nearest	Never	Least
Second	Below	

### Demonstrate the following Cognitive/language skills:

- Sing the ABC song
- Count to ten
- Identify written numbers 1-5
- Categorize items (things that go in water, something you wear, fruits, vegetables, which doesn't belong)
- Retell stories of common knowledge (Three Little Pigs)
- Sing variety of children's songs (Happy Birthday, Itsy Bitsy Spider, etc.)
- Recite variety of Nursery Rhymes
- Describe objects
- Demonstrate understanding of If-Then
- Exposure to sorting/matching of picture/objects that have common initial consonant
- Exposure to letter-sound relationships
- Name
- Address
- How old are you now? How old will you be on your next birthday?
- Multi-step directions "on paper" (i.e.: draw a line under the yellow cat and put a circle around the green man)
- Exposure to colloquial saying, similes

*Excerpted and adapted from Beth Walker, M.Ed., C.E.D., Cert.AVT, East Alabama Ear, Nose, Throat*

# QUESTIONS & ANSWERS



**Q: *My child's audiologist has not completed an audiogram on my child, yet they want him to wear hearing aids. Is this OK?***

**A:** Yes, the identification of a child with a hearing loss is the first step in a process of audiological services and usually provides the audiologist with an idea of the general degree and configuration of the hearing loss. When a child is very young, it may take a series of evaluations to complete a detailed hearing profile. At the same time, the audiologist will put hearing aids on as soon as possible and refine and adjust the hearing aids over time. A pediatric audiologist will use the information acquired in testing as well as trial periods with hearing aids to complete the audiological recommendations for your child. Your input as a parent who has observed your child with hearing aids in the home environment can be very valuable in this amplification refinement process.

**Q: *We would like our son to learn to use his unaided hearing more. We feel if he wears his hearing aids all the time he'll never learn to hear without them. Should we leave his hearing aids off for a part of the day?***

**A:** No, only through consistent use of hearing aids will your child learn to identify sound in his environment and learn to attach meaning to these sounds. For children with normal hearing, this is a skill that requires exposure to speech and environmental sounds in context over a period of time. You can help your son learn to use his hearing more by supporting listening skill development such as providing exposure to different sounds in his environment and calling attention to the sounds. Periodic non-use of a hearing aid does not improve the function of residual hearing.

**Q: *My pediatrician told me that my daughter was too young to have her hearing accurately tested. She is 7 months old. Is this true?***

**A:** No, although it is not possible for a pediatrician to test the hearing of a young infant or toddler, a pediatric audiologist who has specific training and equipment to test young children can test hearing reliability with the first few weeks of life.

**Q: *Does insurance cover the cost of hearing aids?***

**A:** Medical insurance policies do not usually cover the cost of hearing aids. This is determined on a case-by-case basis depending on the benefits of your particular policy. There are some programs such as Medicaid and Children with Special Health Care Needs that do cover the purchase of hearing aids. Your service coordinator will assist you with pursuing financial assistance to purchase your child's hearing aids. As the payer of last resort, Early Steps will cover the cost of hearing aids as assistive technology listed on an Individualized Family Support Plan, only if there is no other method of payment.

**Q: *What happens to equipment purchased by Florida's Early Steps program when my child turns 3 years old?***

**A:** Children may keep the assistive technology devices purchased by the Program as long as it is needed. The equipment should be listed on the transition plan developed with the family and the local school district. If the children outgrow equipment and it can be used by other children, Early Steps may want to put it in their equipment "library".

**Q: *Can hearing aids damage my child's hearing?***

**A:** There are procedural safeguards and test techniques performed by pediatric audiologists to prevent any damage to your child's ears and hearing. The audiologist will adjust the settings of the hearing aids so that they will not damage your child's hearing.

**Q: *How do I know if my son is a candidate for a cochlear implant?***

**A:** This is a discussion you will need to have with a variety of people, including your son's primary health care provider, audiologist, and intervention team. This decision will be made based on the extent of your son's hearing loss, the benefit he gets from wearing hearing aids, and an evaluation performed at a cochlear implant center. Your son's service coordinator can provide you with information and resources about this process. Also, internet sites for cochlear implants usually describe candidate qualifications.

**Q: *Who pays for cochlear implants?***

**A:** Typically, your health insurance will cover the cost of a cochlear implant. This should be discussed with your insurance company. Early Steps does not pay for any medical or surgical procedures but will support the intervention required prior to and after cochlear implant surgery.

**Q: *Someone told me that if my child uses sign language she would never learn to speak. Is this true?***

**A:** How well a child with a severe to profound hearing loss will learn to use speech is dependent on many factors. It has been shown that normal hearing babies that begin to learn signs early in life will use sign until they develop the ability to express their wants and needs using speech. Learning signs may not be the factor that interferes with a child's ability to learn to speak. That may be more related to their amount of hearing ability, consistency of language stimulation, motivation, cognitive ability, and learning style. There are many different philosophies about the use of sign language and the development of spoken language, but research is not yet available to substantiate these many different philosophies. Your intervention team should discuss your child's use of communication features and the intervention services available to your family to address any concerns you may have regarding the development of spoken language.

**Q: *My 9-month-old daughter is constantly throwing her hearing aids off. What can I do to keep them on?***

**A:** You should work with the members of your intervention team to develop a plan to address this problem. This may include some specific activities designed to get her adjusted to wearing the aids, some additional devices that will keep the aids in place, or some further audiological assessment to determine if the aids are working well for her type of hearing loss.

**Q: *If we choose sign language, can my child attend my neighborhood school?***

**A:** A school district is required to provide a free appropriate public education to your child. Therefore, the school district is required to provide the services and supports your child will need to succeed in school. The school district is not required to provide all of these specialized services in every school. Therefore, your child may need to attend a school other

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than your local school to receive the support he or she needs. Attending a school with children with hearing aids, cochlear implants and/or visual modes of communication can enhance the self esteem and sense of belonging of the child with hearing loss in addition to clustering the knowledgeable professionals that can respond to your child's immediate needs without having to travel between schools. There are also advantages to having regular education teachers and students who are accustomed to having children with hearing loss as a typical and well-accepted part of the student body. The fewer supports and specialized services your child requires to succeed in school, the greater the likelihood that his or her specialized needs will be able to be provided in the local school.

**Q: *How can I learn more about "Deaf Culture?"***

**A:** The best way to become exposed to the Deaf culture is to meet families and adults who are part of the Deaf culture. There are Deaf Service Centers throughout the state that assist Deaf individuals who may be helpful linking people together to learn more about one another. Your Early Steps service coordinator and/or the Family Resource Support person at the local Early Steps can assist you in making the necessary contacts. Another way to learn more about the Deaf culture is to read books and view videos. Some books and videos are listed in the resource section of this guide.

**Q: *If my child uses sign language, how can I communicate with him?"***

**A:** Sign language, like any language, is learned by doing and using the language throughout the day. Parents often start by finding sign language books and watching sign language videos. Soon, the baby's need for new signs to explain and comment on the world around them requires more than books or videos. You can enroll in sign language classes offered in your community. These classes offer either American Sign Language, the language of the Deaf culture, or instruction in a manual communication system (signs in English word order). You can connect with other families who use sign with their children, and your child and you can learn through fun, interactive communication. A Deaf mentor may be available in your community. There are Deaf individuals who have a desire to assist the family and child who is deaf with learning American Sign Language and developing a better understanding of the Deaf culture. As your child is better able to communicate through sign language, your skills will need to continue to grow and develop in order to communicate at or above your child's level. Time, commitment, and lots of loving communication with your child and other persons who sign will result in your becoming proficient in the use of sign language or manual communication systems.